

79-12.

*Carey*  
**WATER-PROOFING**

AND  
**DAMP-PROOFING**

**SPECIFICATIONS**

THE PHILIP CAREY CO.  
2ND & WESTMORELAND ST.  
PHILADELPHIA, PA.

**THE PHILIP CAREY COMPANY**  
**LOCKLAND, CINCINNATI, OHIO.**



## SPECIAL SPECIFICATION

This is a special specification written to waterproof the herein stated project.

Project \_\_\_\_\_  
Location \_\_\_\_\_  
Owner \_\_\_\_\_  
Engineer \_\_\_\_\_  
Architect \_\_\_\_\_  
General Contractor \_\_\_\_\_

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the Water-proofing to \_\_\_\_\_

below ground or water level.

**Work Not Included**—Proper excavation or other provision must be made to permit working room for applying the membrane.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be thoroughly cleaned and shall also be smooth and sufficiently dry to obtain good adhesion prior to applying the water-proof membrane.

The Owner or General Contractor shall protect the vertical surfaces and \_\_\_\_\_ of the finished water-proofing with a course of brick or cement mortar \_\_\_\_\_ inches thick. This work must be done at such a time when directed by the Water-proofing Contractor.

For outside waterproofing drain tile may be laid around the footings.

## MATERIALS.

COURSES	lbs. per 100 square feet.
(A) Carey Water-proofing Primer	
(B) Carey Water-proofing Asphalt No. 114	
(C) Carey Water-proofing _____	
(D) Carey Water-proofing Asphalt No. 114	
(E) Carey Water-proofing _____	
(F) Carey Water-proofing Asphalt No. 114	
(G) Carey Water-proofing _____	
(H) Carey Water-proofing Asphalt No. 114	
(I) Carey Water-proofing _____	
(J) Carey Water-proofing Asphalt No. 114	
(K) Carey Water-proofing _____	
(L) Carey Water-proofing Asphalt No. 114	
(M) _____	
(N) _____	
(O) _____	
(P) _____	
(Q) _____	

Total approx. lbs. per 100 square feet.

**APPLICATION**—CAREY WATER-PROOFING PRIMER shall be applied uniformly and thoroughly brushed into the surface to be water-proofed. When the primer has dried to a slightly tacky state the surface shall be mopped with CAREY WATER-PROOFING ASPHALT, No. 114, into which, while still hot, shall be embedded the first course of the Built-up Water-proof Membrane.

This procedure shall continue until the complete Membrane is built up as specified under Materials, making \_\_\_\_\_ distinct courses of asphalt and \_\_\_\_\_

Reinforce all angles at corners, walls, etc., by cementing with CAREY WATER-PROOFING ASPHALT No. 114, applied hot, into which, shall be embedded one thickness of CAREY WATER-PROOFING \_\_\_\_\_ cut to extend at least six inches each way from the angle. Two such sheets shall be applied; one immediately after applying the primer and another after the membrane is completed.

Submitted by \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TD 888-088202 TCF

NUMBER OF PLIES, LAYERS OR COURSES

	Hydrostatic Head in Feet	Pressure in lbs. per sq. inch	Lifting Pressure in lbs. per square foot under floor	Average Pressure in lbs. per sq. ft. on wall surface affected	Carey Water-proofing Compound Specification No. 31	Asphalt No. 114 and Water-proofing Felt	Asphalt No. 114 and Water-proofing Asbestos Felt	Asphalt No. 114 and Carey Fabricated Membrane	Asphalt No. 114 and Water-proofing Burlap	No. 66 Subway Asphalt and Carey Preformed Membrane	Cement Mortar support on outside of vertical walls $\frac{1}{2}$ ; 2 proportion. Thickness in inches
1	0.43	62.5	31.2	$\frac{1}{16}$ " thick	2	2	2	1	2	$\frac{1}{8}$ " 1 Ply	1"
2	0.86	125.0	62.5	$\frac{1}{16}$ " "	2	2	2	1	2	$\frac{1}{8}$ " "	1"
3	1.30	187.5	93.7	$\frac{1}{16}$ " "	2	2	2	1	2	$\frac{1}{8}$ " "	1"
4	1.73	250.0	125.0	$\frac{1}{8}$ " "	2	2	2	1	2	$\frac{1}{8}$ " "	1"
5	2.17	312.5	156.2	$\frac{1}{8}$ " "	2	2	2	1	2	$\frac{1}{8}$ " "	1"
6	2.60	375.0	187.5	$\frac{3}{16}$ " "	3	3	3	1	3	$\frac{1}{8}$ " "	1"
7	3.01	437.5	218.4	$\frac{3}{16}$ " "	3	3	3	2	3	$\frac{1}{8}$ " "	1"
8	3.47	500.0	250.0	$\frac{1}{4}$ " "	3	3	3	2	3	$\frac{1}{8}$ " 2 Ply	1"
9	3.87	562.5	280.8	$\frac{1}{4}$ " "	4	4	3	3	3	$\frac{1}{8}$ " "	$1\frac{1}{2}$ "
10	4.34	625.0	312.5	$\frac{1}{2}$ " "	4	4	3	3	3	$\frac{1}{4}$ " "	$1\frac{1}{2}$ "
12	5.21	750.0	375.0	$\frac{1}{2}$ " "	5	5	3	4	4	$\frac{1}{4}$ " "	2"
15	6.51	937.5	468.7		6	6	3	4	5	$\frac{1}{2}$ " "	2"
20	8.68	1250.0	625.0		7	7	4	5	6	$\frac{1}{2}$ " "	2"
25	10.85	1562.5	781.2		8	8	4	6	7	$\frac{1}{4}$ " 3 Ply	2"
30	13.02	1875.0	937.5		9	9	4	7	8	$\frac{1}{4}$ " "	2"
40	17.36	2500.0	1250.0		10	10	5	8	9	$\frac{1}{4}$ " "	3"
60	26.04	3750.0	1875.0		12	12	6	9	10	$\frac{1}{4}$ " "	4"
80	34.72	5000.0	2500.0		14	14	7	10	10	$\frac{1}{4}$ " "	6"
100	43.40	6250.0	3125.0		14	14	7	10	10	$\frac{1}{4}$ " "	

GENERAL

USES

Ideal for  
Basement Water-proofing

For General Water-proofing

For General Water-proofing and  
Mill Construction, Fire-Resistant

For Bridges and Structures  
where expansion and contraction  
take place

For Bridges and Structures  
where expansion and contraction  
are evident

For Bridges and Structures  
where expansion and contraction  
are excessive

For Deep Reservoirs and  
Heavy Duty Water-proofing



SPECIFICATION

No. 31

A TROWEL COAT  
FOR GENERAL WATERPROOFING  
EASY TO APPLY

Copyrighted, 1925, by  
THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION No. 31

### Abbreviated Specification

WATERPROOFING—To be Carey Waterproofing Specification No. 31 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply Carey Waterproofing Compound to the foundation walls below ground level and underbed of basement floor.

**Work Not Included**—For this specification the excavation should be made at least two feet beyond the foundation wall line, to permit a man working room for application of the waterproofing compound to the outside of the foundation walls.

Pointing up masonry or cementing of any kind is not included. The foundation walls, whether masonry or concrete, should be placed immediately on the fresh waterproofing compound applied to the footings. The waterproofing compound on the foundation walls shall be permitted to dry for 48 hours before back filling with earth, and then back filling should be done very carefully in order not to injure the membrane. The underbed of the basement floor shall be made by the cement contractor and shall consist of 1-inch thick concrete well tamped and leveled off.

#### Materials:—

Carey Waterproofing Compound  $\frac{1}{8}$ -inch thick on foundation walls—Approx. 80 lbs. per 100 sq. ft.

Carey Waterproofing Compound  $\frac{1}{4}$ -inch thick on underbed of basement floor and footings—Approx. 160 lbs. per 100 sq. ft.

#### Application:—

Footings: Carey Waterproofing Compound shall be smoothly troweled  $\frac{1}{4}$  inch thick on all footings.

Foundation Walls: A smooth trowel coating of Carey Waterproofing Compound shall be applied to the outside of all foundation walls below ground level. This coating shall be approximately  $\frac{1}{8}$  inch thick and at no place shall the wall appear uncovered.

Basement Floor: In waterproofing the basement floor Carey Waterproofing Compound shall be applied  $\frac{1}{4}$  inch thick to the underbed. It shall be troweled over small areas and the concrete for the finished floor applied immediately by the cement contractor, so that no hauling or tramping is done in the waterproofing compound.

## A FIBROUS WATERPROOFING CEMENT MORTAR

No Kettles—No Heating—No Mixing  
Simply Applied With a Trowel

### FLEXIBLE

Consists of pure waterproofing cements, selected solvents, and clean asbestos rock fibre. The result is a plastic fibrous cement.

It will form within twenty-four to forty-eight hours a tough flexible waterproof membrane.



### ELASTIC

Will readily respond to all actions of expansion and contraction without in any way injuring the impermeability of the coating.

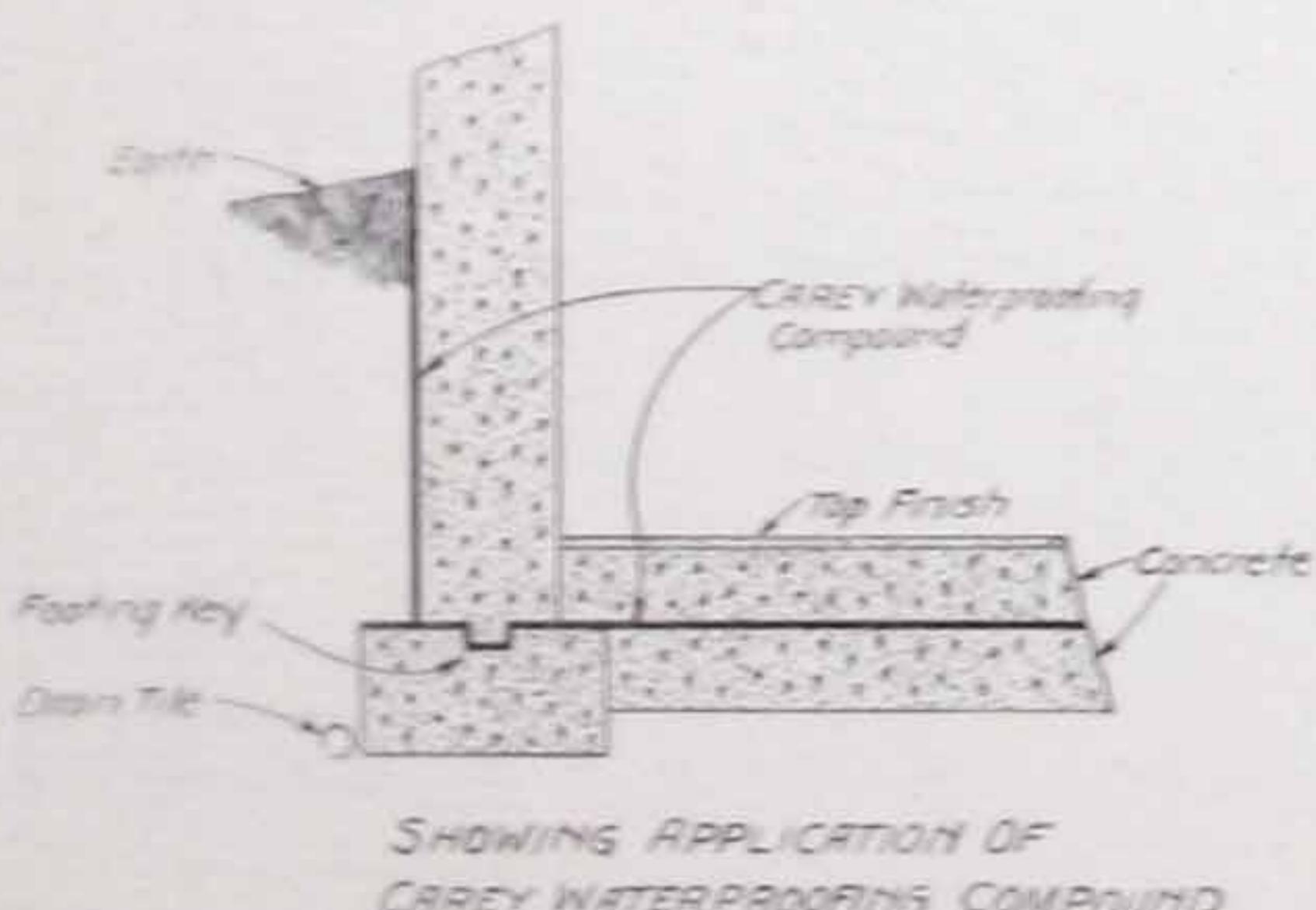
It will adhere readily to any rough, smooth, wet, dry, cold or warm surface.

Calvary Lutheran Church—Parish House  
Buffalo, N. Y.

## CAREY WATERPROOFING COMPOUND

Is unaffected by the acids and alkalies in the ground water, because it contains absolutely no organic matter. It is permanent, dependable and assures a dry and healthful basement.

Comes ready for use, packed in 30-lb. to 500-lb. containers. All containers should be kept tightly closed when not in use. If a thinner is necessary use pure naphtha or gasoline.



### HOW USED?

For a  $\frac{1}{8}$ -inch thick membrane, 80 lbs. of Carey Waterproofing Compound are necessary for 100 sq. ft. of surface. The quantity required for other thicknesses can be calculated from this figure. The accompanying diagram shows its application.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

### List of Carey Distributors

P. O. Sorenson Company, . . . . .	Albuquerque, N. M.	The L. J. Bolster Co., Inc., . . . . .	Louisville, Ky.
The R. O. Campbell Coal Co., . . . . .	Atlanta, Ga.	Fischer Lime & Cement Company, . . . . .	Memphis, Tenn.
The Philip Carey Company, . . . . .	Atlanta, Ga.	The Cameron & Barkley Co., . . . . .	Miami, Fla.
The Philip Carey Company, . . . . .	Baltimore, Md.	W. S. Nott Company, . . . . .	Minneapolis, Minn.
The Young & Vann Supply Co., . . . . .	Birmingham, Ala.	T. L. Herbert & Sons, . . . . .	Nashville, Tenn.
The Philip Carey Company, . . . . .	Boston, Mass.	J. J. Clarke Company, Ltd., . . . . .	New Orleans, La.
The Carey Company, Inc., . . . . .	Buffalo, N. Y.	Robert A. Keasbey Co., . . . . .	New York, N. Y.
The Charlotte Supply Co., . . . . .	Charlotte, N. C.	The Philip Carey Company (Domestic), . . . . .	New York, N. Y.
James Supply Company, . . . . .	Chattanooga, Tenn.	The Philip Carey Company (Export), . . . . .	New York, N. Y.
The Philip Carey Company, . . . . .	Chicago, Ills.	Holland Lumber Company, . . . . .	Omaha, Nebr.
The Philip Carey Company (Home Office Branch) Cincinnati, O.	Cincinnati, Ohio	The Philip Carey Company, . . . . .	Philadelphia, Pa.
The Breese Bros. Co., . . . . .	Cincinnati, Ohio	Pine Bluff Brick & Material Co., . . . . .	Pine Bluff, Ark.
The R. E. Kramig & Co., . . . . .	Cincinnati, Ohio	The Philip Carey Company, . . . . .	Pittsburgh, Pa.
The Carey Company, . . . . .	Cleveland, Ohio	Pacific Building Materials Company, . . . . .	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	The Philip Carey Company, . . . . .	Richmond, Va.
The Hedges-Atkins Supply Co., . . . . .	Denver, Colo.	The Philip Carey Company, . . . . .	St. Louis, Mo.
The Carey Company, . . . . .	Detroit, Mich.	Allyn L. Burr Company, . . . . .	Sacramento, Calif.
Momsen-Dunegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	Peden Iron & Steel Co., . . . . .	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	Jones Bros. Asbestos Supply Co., Inc., . . . . .	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	George Scofield Company, . . . . .	Seattle, Wash.
Banks-Miller Supply Co., . . . . .	Huntington, W. Va.	Nott-Atwater Company, . . . . .	Spokane, Wash.
The Philip Carey Company, . . . . .	Indianapolis, Ind.	George Scofield Company, . . . . .	Tacoma, Wash.
The Cameron & Barkley Co., . . . . .	Jacksonville, Fla.	The Cameron & Barkley Co., . . . . .	Tampa, Fla.
The Schafer Corporation, . . . . .	Kansas City, Mo.	The Carey Company, . . . . .	Toledo, Ohio
A. G. Heins Company, . . . . .	Knoxville, Tenn.	The Philip Carey Company, . . . . .	Toronto, Ont., Can.
Fischer Cement & Roofing Co., . . . . .	Little Rock, Ark.	Asbestos Covering Company, . . . . .	Washington, D. C.
Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

# No. 32

FOR GENERAL WATERPROOFING OF  
THE OUTSIDE OF FOUNDATION WALLS,  
BRIDGES, RESERVOIRS, TUNNELS  
AND OTHER STRUCTURES

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY

General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.

*Carey*  
**WATER-PROOFING**

**SPECIFICATION No. 32**

**Abbreviated Specification**

WATERPROOFING—To be Carey Waterproofing Specification No. 32 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the built-up waterproof membrane to ..... below ground level.

**Work Not Included**—Proper excavation or other provision must be made to permit working room for applying the membrane.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be cleaned and shall also be smooth and dry prior to applying the waterproof membrane. A cement mortar or brick protection shall be placed over the waterproofing for best results.

**Materials**—Materials used in the construction of the waterproofing shall be as follows:

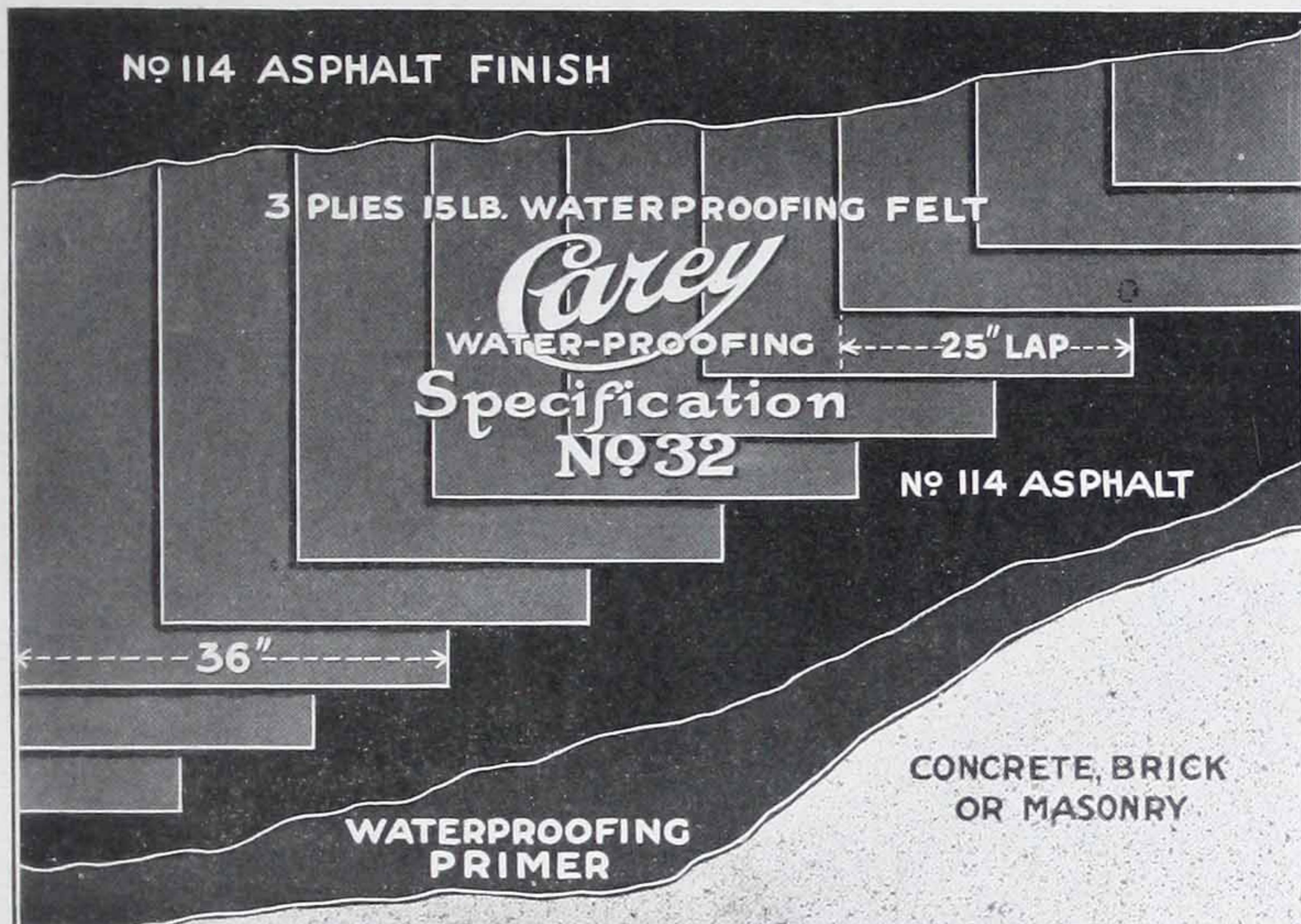
Courses	Lbs. per 100 sq. ft.
(A) Carey Waterproofing Primer (1 gallon) .....	9
(B) Carey Waterproofing Asphalt No. 114 .....	50
(C) Carey Waterproofing Felt .....	15
(D) Carey Waterproofing Asphalt No. 114 .....	25
(E) Carey Waterproofing Felt .....	15
(F) Carey Waterproofing Asphalt No. 114 .....	25
(G) Carey Waterproofing Felt .....	15
(H) Carey Waterproofing Asphalt No. 114 .....	25
Total approx. weight per 100 sq. ft. to be .....	179 lbs.

**Application**—CAREY WATERPROOFING PRIMER shall be applied uniformly and thoroughly brushed in. When the primer has dried to a slight tacky state the surface shall be mopped with CAREY WATERPROOFING ASPHALT, No. 114, into which, while still hot, shall be embedded the first sheet of CAREY WATERPROOFING FELT. The successive sheets of felt shall overlap the previous sheet 25 inches, making eight courses of asphalt and felt including the primer. All the sheets of felt shall be solidly cemented together with asphalt, so that no place shall felt touch felt.

Reinforce all angles at corners, walls, etc., by cementing with CAREY WATERPROOFING ASPHALT, No. 114, applied hot, into which, shall be embedded one thickness of 15-lb. CAREY WATERPROOFING FELT cut to extend at least six inches each way from the angle. Two such sheets shall be applied. One immediately after applying the primer and another after the membrane is completed.

## INSIST ON CAREY WATERPROOFING MATERIALS

There is Fifty Years of Service Behind Them

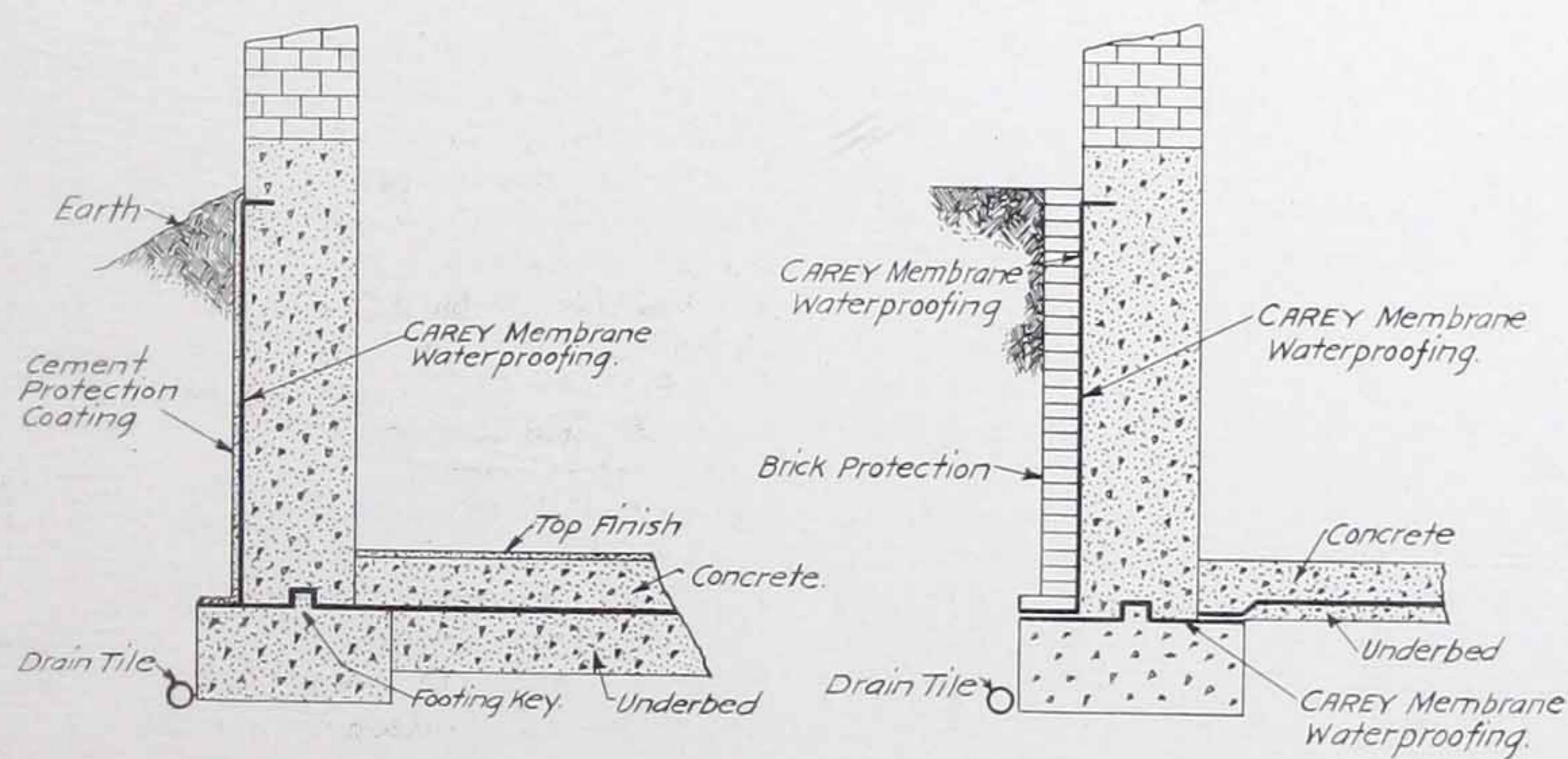


Upon the quality of materials and workmanship  
depends the success of the membrane

CAREY WATERPROOFING FELT is a high quality felt thoroughly saturated and waterproofed with asphalt. It is tough, flexible and resilient.

CAREY WATERPROOFING ASPHALT, No. 114, is a highly tempered asphalt oxidized so as to resist weathering and is absolutely pure bitumen.

Both of these materials are manufactured primarily for waterproofing purposes and meet the specifications of the American Society for Testing Materials and the Federal Specification Board.



METHOD OF FORMING WATERPROOF  
ENVELOPE FOR FOUNDATION WALLS.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

**List of Carey Distributors.**

P. O. Sorenson Company, . . . . .	Albuquerque, N. M.	The L. J. Bolster Co., Inc., . . . . .	Louisville, Ky.
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The Philip Carey Company, . . . . .	Baltimore, Md.	W. S. Nott Company, . . . . .	Minneapolis, Minn.
The Young & Vann Supply Co., . . . . .	Birmingham, Ala.	T. L. Herbert & Sons, . . . . .	Nashville, Tenn.
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The Breese Bros. Co., . . . . .	Cincinnati, Ohio	Pine Bluff Brick & Material Co., . . . . .	Pine Bluff, Ark.
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Momsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	Peden Iron & Steel Co., . . . . .	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	Jones Bros. Asbestos Supply Co., Inc., . . . . .	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	George Scofield Company, . . . . .	Seattle, Wash.
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Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

# No. 33

FOR WATERPROOFING FLOORS  
IN MILL CONSTRUCTION  
ALKALI, ACID AND FIRE RESISTANT

Copyrighted, 1925, by  
THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY

General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION No. 33

### Abbreviated Specification

WATERPROOFING—To be Carey Waterproofing Specification No. 33 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the built up waterproof membrane to the wood floors in mill construction.

**Work Not Included**—All knot holes and open cracks shall be tightly sealed. The floor shall be made free from splinters and nails before applying the waterproofing. Over the membrane shall be layed a second flooring and the flashings on the walls and columns shall be covered with baseboards.

**Materials**—Materials used in the construction of the waterproofing shall be as follows:

Courses	Lbs. per 100 sq. ft.
(A) Carey Waterproofing Asphalt No. 114.....	25
(B) Carey 35-lb. Waterproofing Asbestos Felt.....	35
(C) Carey Waterproofing Asphalt No. 114.....	25
(D) Carey 15-lb. Waterproofing Asbestos Felt.....	15
(E) Carey Waterproofing Asphalt No. 114.....	25
(F) Carey 15-lb. Waterproofing Asbestos Felt.....	15
(G) Carey Waterproofing Asphalt No. 114.....	25
Total approx. weight per 100 sq. ft. to be.....	165 lbs.

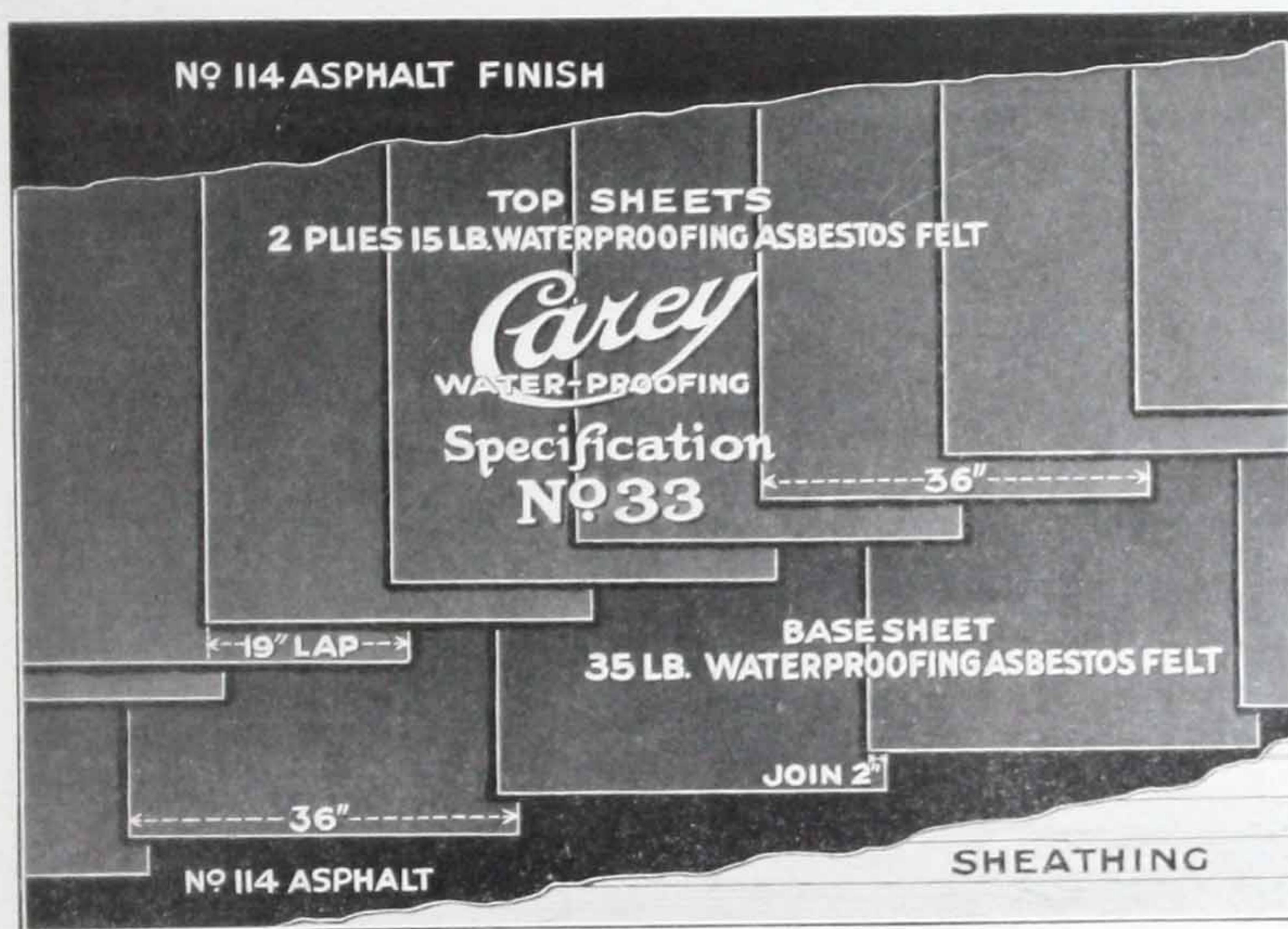
**Application**—The clean dry base floor shall be mopped with CAREY WATER-PROOFING ASPHALT, No. 114, into which, while still hot, shall be imbedded sheets of 35-lb. Waterproofing Asbestos Felt lapped two inches. Over this shall be applied two plies 15-lb. Waterproofing Asbestos Felt overlapping one another nineteen inches and also imbedded in hot asphalt No. 114.

Reinforce all angles at corners, walls, etc., by cementing with CAREY WATER-PROOFING ASPHALT, No. 114, applied hot, into which shall be imbedded one thickness of 35-lb. CAREY WATERPROOFING ASBESTOS FELT cut to extend at least six inches each way from the angle. Two such sheets shall be applied; one prior to applying the first sheet, another after the membrane is completed. A finishing coat of CAREY WATERPROOFING ASPHALT, No. 114 shall be applied over the entire membrane.

## SAVE THE LOSS FROM WATER DAMAGE

By Waterproofing All Floors in Mill Construction with  
Carey Waterproofing Specification No. 33

In laundries, slaughter houses, paper mills, ice cream establishments, dairies and the like, water is constantly used. In these industries the damage to merchandise, machinery and inconvenience to employees caused by water dripping from one floor to the other is so great that it pays to have waterproofed floors.



A specification that defies water, fire and time

### LOSS BY WATER FAR EXCEEDS LOSS BY FIRE.

In mill constructed warehouses and especially in buildings where sprinkler systems are used, waterproofed floors should be made essential to confine the loss by water to one floor.

CAREY WATERPROOFING ASBESTOS FELTS are made of pure asbestos rock fiber and impregnated with a specially prepared asphalt that makes the felts waterproof, flexible and tough. They contain nothing that deteriorates or decays.

The asphalt used is Carey's well known Waterproofing Asphalt No. 114. It is so blended and tempered as to have a very low susceptibility to temperature changes. It will not crack in winter and will not become too soft in summer; thus, its sealing qualities are unimpaired.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

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The Young & Vann Supply Co., . . . . .	Birmingham, Ala.	T. L. Herbert & Sons, . . . . .	Nashville, Tenn.
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The Philip Carey Company (Home Office Branch) Cincinnati, O.	Cincinnati, O.	The Philip Carey Company, . . . . .	Philadelphia, Pa.
The Breese Bros. Co., . . . . .	Cincinnati, Ohio	Pine Bluff Brick & Material Co., . . . . .	Pine Bluff, Ark.
The R. E. Kramig & Co., . . . . .	Cincinnati, Ohio	The Philip Carey Company, . . . . .	Pittsburgh, Pa.
The Carey Company, . . . . .	Cleveland, Ohio	Pacific Building Materials Company, . . . . .	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	The Philip Carey Company, . . . . .	Richmond, Va.
The Hedges-Atkins Supply Co., . . . . .	Denver, Colo.	The Philip Carey Company, . . . . .	St. Louis, Mo.
The Carey Company, . . . . .	Detroit, Mich.	Allyn L. Burr Company, . . . . .	Sacramento, Calif.
Momsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	Peden Iron & Steel Co., . . . . .	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	Jones Bros. Asbestos Supply Co., Inc., . . . . .	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	George Scofield Company, . . . . .	Seattle, Wash.
Banks-Miller Supply Co., . . . . .	Huntington, W. Va.	Nott-Atwater Company, . . . . .	Spokane, Wash.
The Philip Carey Company, . . . . .	Indianapolis, Ind.	George Scofield Company, . . . . .	Tacoma, Wash.
The Cameron & Barkley Co., . . . . .	Jacksonville, Fla.	The Cameron & Barkley Co., . . . . .	Tampa, Fla.
The Schafer Corporation, . . . . .	Kansas City, Mo.	The Carey Company, . . . . .	Toledo, Ohio
A. G. Heins Company, . . . . .	Knoxville, Tenn.	The Philip Carey Company, . . . . .	Toronto, Ont., Can.
Fischer Cement & Roofing Co., . . . . .	Little Rock, Ark.	Asbestos Covering Company, . . . . .	Washington, D. C.
Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

No. 34

A FABRICATED MEMBRANE WATERPROOFING  
OF HIGH TENSILE STRENGTH  
RESISTS EXPANSION AND CONTRACTION

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION No. 34

### Abbreviated Specification

WATERPROOFING—To be Carey Waterproofing Specification No. 34 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the built up waterproof membrane to.....  
below ground level.

**Work Not Included**—Proper excavation or other provision must be made to permit working room for applying the membrane.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be cleaned and shall also be smooth and dry prior to applying the waterproof membrane. A cement mortar or brick protection shall be placed over the waterproofing for best results.

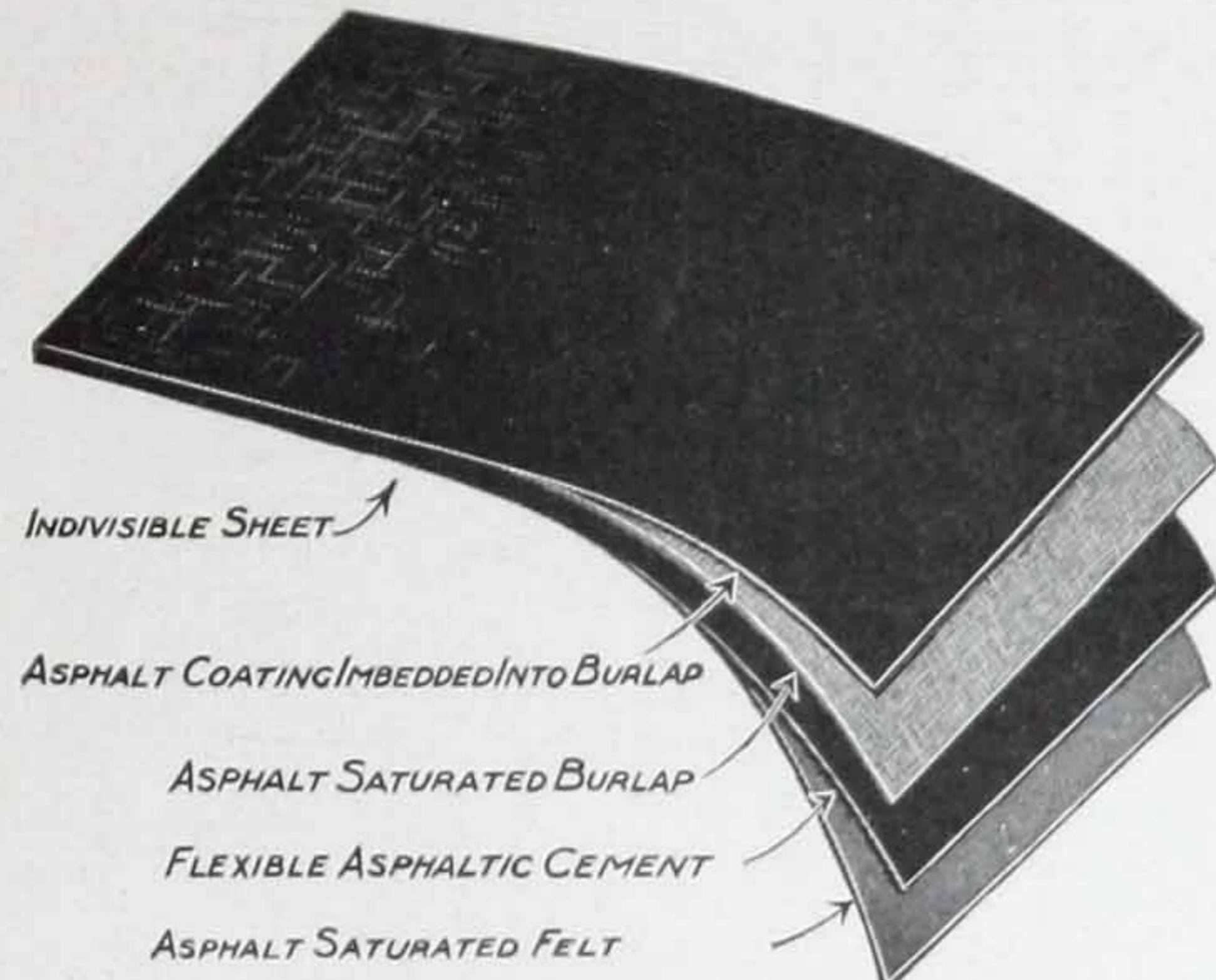
**Materials**—Materials used in the construction of the waterproofing shall be as follows:

Courses	Lbs. per 100 sq. ft.
(A) Carey Waterproofing Primer (1 gallon)	9
(B) Carey Waterproofing Asphalt No. 114	50
(C) Carey Fabricated Membrane	40
(D) Carey Waterproofing Asphalt No. 114	25
(E) Carey Fabricated Membrane	40
(F) Carey Waterproofing Asphalt No. 114	25
Total approx. weight per 100 sq. ft. to be	189 lbs.

**Application**—CAREY WATERPROOFING PRIMER shall be applied uniformly and thoroughly brushed in. When the primer has dried to a slight tacky state the surface shall be mopped with CAREY WATERPROOFING ASPHALT, No. 114, into which, while still hot, shall be embedded the first sheet of CAREY FABRICATED MEMBRANE. The second sheet of Fabricated Membrane shall overlap the previous sheet nineteen inches, making six courses of asphalt and Fabricated Membrane including the primer. Both sheets of Fabricated Membrane shall be solidly cemented together with asphalt, so that no place shall Membrane touch Membrane.

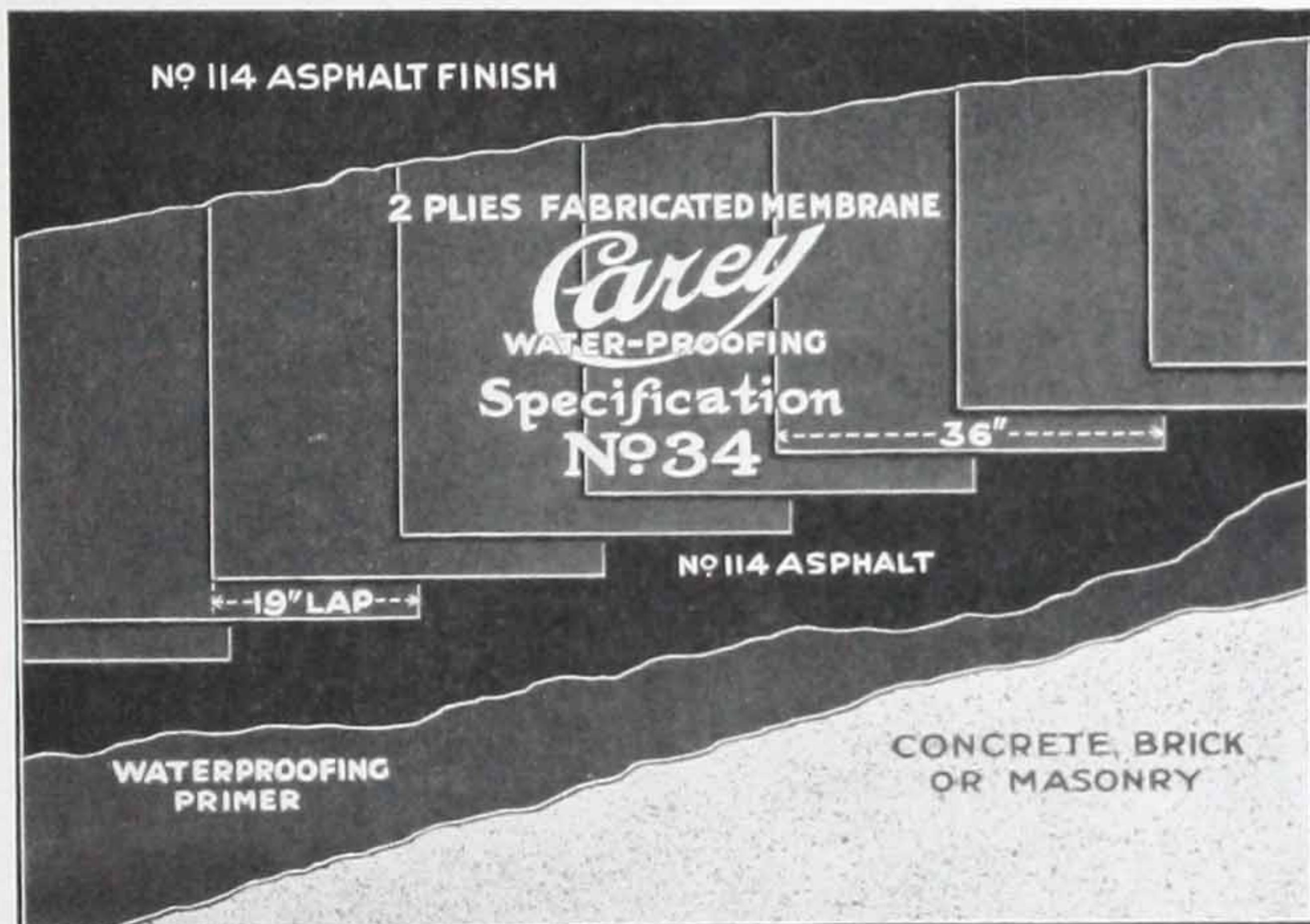
Reinforce all angles at corners, walls, etc., by cementing with CAREY WATERPROOFING ASPHALT, No. 114, applied hot, into which shall be embedded one thickness of CAREY FABRICATED MEMBRANE cut to extend at least six inches each way from the angle. Two such sheets shall be applied. One immediately after applying the primer and another after the membrane is completed.

## ECONOMICAL, DURABLE, FLEXIBLE AND DEPENDABLE WATERPROOFING



The adjoining picture shows the superiority, durability and quality of the construction.

The flexibility of Carey Fabricated Membrane is such as to be easily bent to conform to any uneven surface.



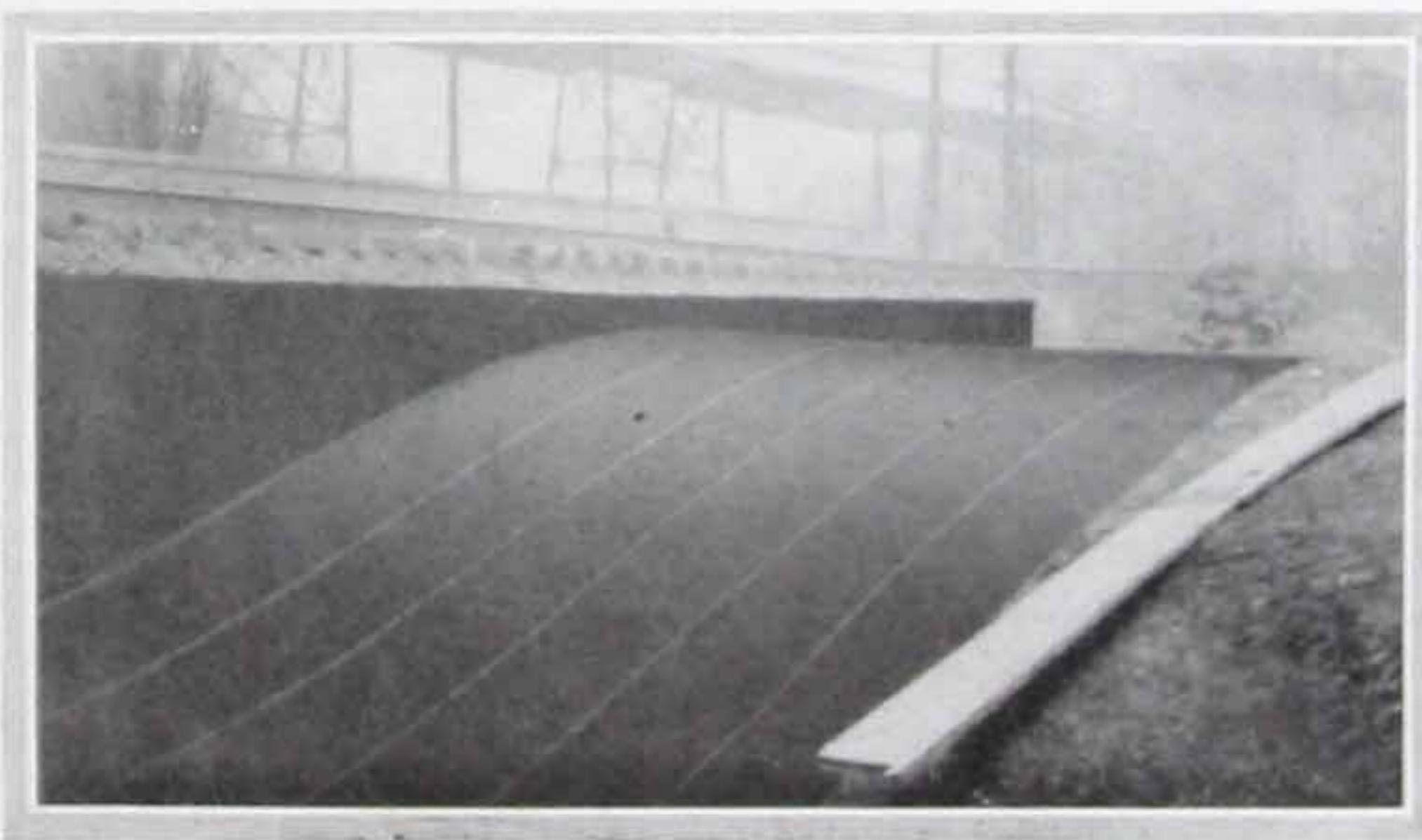
Has given universal satisfaction

Carey Fabricated Membrane Waterproofing has all the advantages of a burlap membrane with great tensile strength and the ability to care for all expansion and contraction. The felt and asphalt insure a waterproof barrier.

### COSTS LESS TO APPLY

As the sheets of felt and burlap are cemented at the factory, one mopping is eliminated on the job.

An inspection of one of our samples will convince you of the practicability of this waterproofing.



Waterproofing Warrington Avenue Bridge,  
Pittsburgh, Pa.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

## List of Carey Distributors.

P. O. Sorenson Company, . . . . .	Albuquerque, N. M.	Louisville, Ky.
The R. O. Campbell Coal Co., . . . . .	Atlanta, Ga.	Memphis, Tenn.
The Philip Carey Company, . . . . .	Atlanta, Ga.	Miami, Fla.
The Philip Carey Company, . . . . .	Baltimore, Md.	Minneapolis, Minn.
The Young & Vann Supply Co., . . . . .	Birmingham, Ala.	Nashville, Tenn.
The Philip Carey Company, . . . . .	Boston, Mass.	New Orleans, La.
The Carey Company, Inc., . . . . .	Buffalo, N. Y.	New York, N. Y.
The Charlotte Supply Co., . . . . .	Charlotte, N. C.	New York, N. Y.
James Supply Company, . . . . .	Chattanooga, Tenn.	New York, N. Y.
The Philip Carey Company, . . . . .	Chicago, Ills.	Omaha, Nebr.
The Philip Carey Company (Home Office Branch) . . . . .	Cincinnati, O.	Philadelphia, Pa.
The Breese Bros. Co., . . . . .	Cincinnati, Ohio	Pine Bluff, Ark.
The R. E. Kramig & Co., . . . . .	Cincinnati, Ohio	Pittsburgh, Pa.
The Carey Company, . . . . .	Cleveland, Ohio	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	Richmond, Va.
The Hedges-Atkins Supply Co., . . . . .	Denver, Colo.	St. Louis, Mo.
The Carey Company, . . . . .	Detroit, Mich.	Sacramento, Calif.
Momsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	Seattle, Wash.
Banks-Miller Supply Co., . . . . .	Huntington, W. Va.	Spokane, Wash.
The Philip Carey Company, . . . . .	Indianapolis, Ind.	Tacoma, Wash.
The Cameron & Barkley Co., . . . . .	Jacksonville, Fla.	Tampa, Fla.
The Schafer Corporation, . . . . .	Kansas City, Mo.	Toledo, Ohio
A. G. Heins Company, . . . . .	Knoxville, Tenn.	Toronto, Ont., Can.
Fischer Cement & Roofing Co., . . . . .	Little Rock, Ark.	Washington, D. C.
Warren & Bailey Company, . . . . .	Los Angeles, Calif.	Wheeling, W. Va.
The L. J. Bolster Co., Inc., . . . . .		
Fischer Lime & Cement Company, . . . . .		
The Cameron & Barkley Co., . . . . .		
W. S. Nott Company, . . . . .		
T. L. Herbert & Sons, . . . . .		
J. J. Clarke Company, Ltd., . . . . .		
Robert A. Keasbey Co., . . . . .		
The Philip Carey Company (Domestic), . . . . .		
The Philip Carey Company (Export), . . . . .		
Holland Lumber Company, . . . . .		
The Philip Carey Company, . . . . .		
Pine Bluff Brick & Material Co., . . . . .		
The Philip Carey Company, . . . . .		
Pacific Building Materials Company, . . . . .		
The Philip Carey Company, . . . . .		
The Philip Carey Company, . . . . .		
Allyn L. Burr Company, . . . . .		
The Galigher Machinery Co., . . . . .		
Peden Iron & Steel Co., . . . . .		
Jones Bros. Asbestos Supply Co., Inc., . . . . .		
George Scofield Company, . . . . .		
Nott-Atwater Company, . . . . .		
George Scofield Company, . . . . .		
The Cameron & Barkley Co., . . . . .		
The Carey Company, . . . . .		
The Philip Carey Company, . . . . .		
Asbestos Covering Company, . . . . .		
The Philip Carey Company, . . . . .		

*Carey*  
**WATER-PROOFING**

SPECIFICATION

**No. 35**

FOR WATERPROOFING  
BRIDGES AND OTHER STRUCTURES  
WHERE EXPANSION AND CONTRACTION  
ARE EXCESSIVE

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THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION No. 35

### Abbreviated Specification

WATERPROOFING—To be Carey Waterproofing Specification No. 35 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the built up waterproof membrane to ..... below ground level.

**Work Not Included**—Proper excavation or other provision must be made to permit working room for applying the membrane.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be cleaned and shall also be smooth and dry prior to applying the waterproof membrane. A cement mortar or brick protection shall be placed over the waterproofing for best results.

**Materials**—Materials used in the construction of the waterproofing shall be as follows:

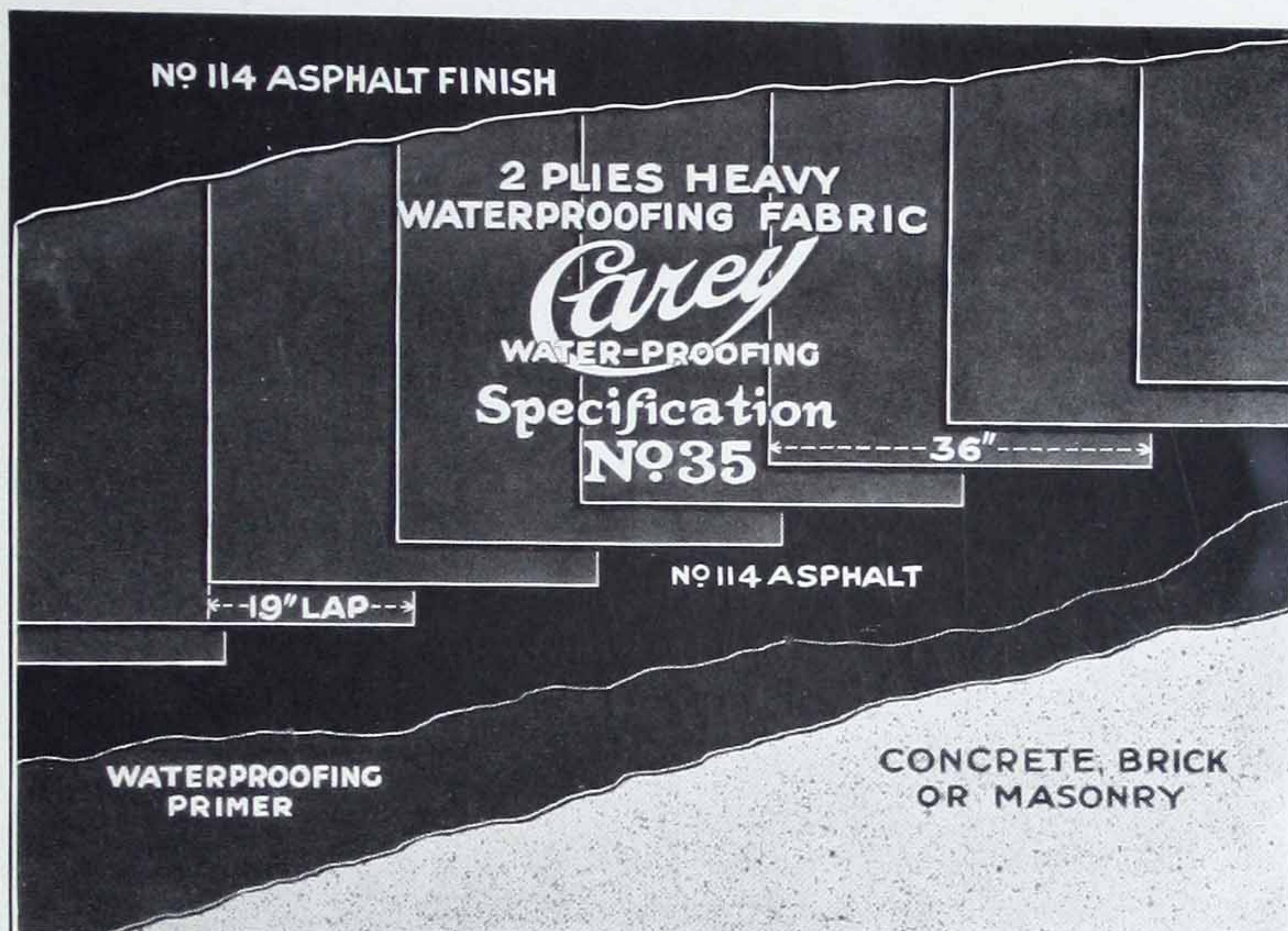
Courses	Lbs. per 100 sq. ft.
(A) Carey Waterproofing Primer (1 gallon)	9
(B) Carey Waterproofing Asphalt No. 114	50
(C) Carey Heavy Waterproofing Fabric	11
(D) Carey Waterproofing Asphalt No. 114	25
(E) Carey Heavy Waterproofing Fabric	11
(F) Carey Waterproofing Asphalt No. 114	25
Total approx. weight per 100 sq. ft. to be	131 lbs.

**Application**—CAREY WATERPROOFING PRIMER shall be applied uniformly and thoroughly brushed in. When the primer has dried to a slight tacky state the surface shall be mopped with CAREY WATERPROOFING ASPHALT, No. 114, into which, while still hot, shall be imbedded the first sheet of CAREY HEAVY WATERPROOFING FABRIC. The second sheet of CAREY HEAVY WATERPROOFING FABRIC shall overlap the previous sheet nineteen inches and shall also be imbedded in hot asphalt No. 114, so that at no place shall fabric touch fabric.

Reinforce all angles at corners, walls, etc., by cementing with CAREY WATERPROOFING ASPHALT, No. 114, applied hot, into which shall be imbedded one thickness of CAREY HEAVY WATERPROOFING FABRIC cut to extend at least six inches each way from the angles. Two such sheets shall be applied; one immediately after applying the primer and another after the membrane is completed. A finishing coat of CAREY WATERPROOFING ASPHALT, No. 114, shall be applied over the entire membrane.

## A FABRIC OF HIGH TENSILE STRENGTH AND STRETCH

Forms a membrane that cannot be beat for general waterproofing of concrete structures where expansion and contraction are excessive.



Two ply construction for general use

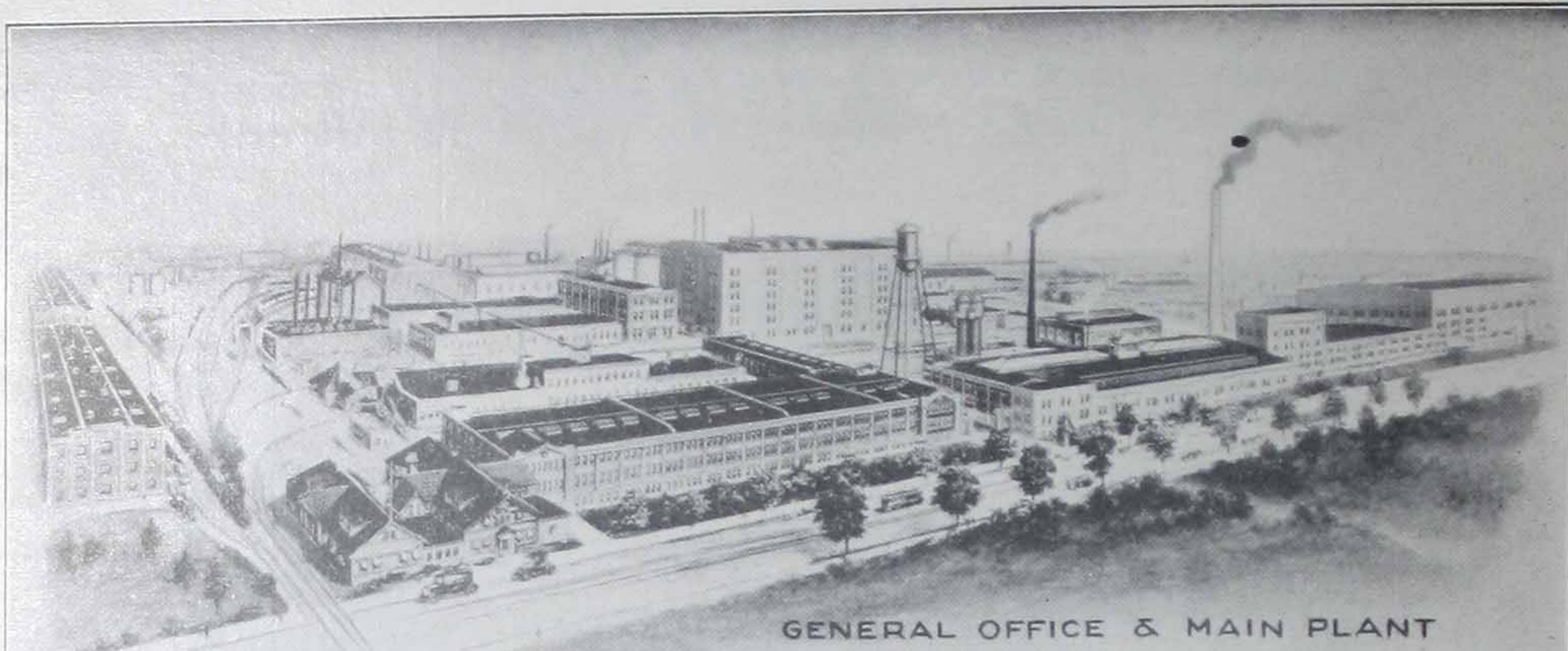
### CAREY HEAVY WATERPROOFING FABRIC CHARACTERISTICS

Thread Count . . . . .	32 per inch lengthwise 28 per inch crosswise
Weight Untreated . . . . .	Minimum 5 oz. per sq. yd.
Weight Treated . . . . .	Minimum 14 $\frac{3}{4}$ oz. per sq. yd.
Tensile Strength . . . (both directions)	Minimum 60 lbs. per inch in width
Stretch (both directions) . . . . .	Minimum 10%

The fabric is made from 100% pure cotton fabric thoroughly saturated with CAREY WATERPROOFING ASPHALT, No. 114, a highly refined pure bitumen and the same material that is used as the asphalt binder in building up the membrane.

All the materials used in this specification are of high quality and meet the specification of the American Society for Testing Materials.

CAREY HEAVY WATERPROOFING FABRIC is packed in rolls 36 inches wide and 50 sq. yds. each. The asphalt No. 114 comes in drums of 400 lbs. each.



GENERAL OFFICE & MAIN PLANT  
Lockland, Cincinnati, Ohio.

The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

**List of Carey Distributors.**

P. O. Sorenson Company, . . . . .	Albuquerque, N. M.	The L. J. Bolster Co., Inc., . . . . .	Louisville, Ky.
The R. O. Campbell Coal Co., . . . . .	Atlanta, Ga.	Fischer Lime & Cement Company, . . . . .	Memphis, Tenn.
The Philip Carey Company, . . . . .	Atlanta, Ga.	The Cameron & Barkley Co., . . . . .	Miami, Fla.
The Philip Carey Company, . . . . .	Baltimore, Md.	W. S. Nott Company, . . . . .	Minneapolis, Minn.
The Young & Vann Supply Co., . . . . .	Birmingham, Ala.	T. L. Herbert & Sons, . . . . .	Nashville, Tenn.
The Philip Carey Company, . . . . .	Boston, Mass.	J. J. Clarke Company, Ltd., . . . . .	New Orleans, La.
The Carey Company, Inc., . . . . .	Buffalo, N. Y.	Robert A. Keasbey Co., . . . . .	New York, N. Y.
The Charlotte Supply Co., . . . . .	Charlotte, N. C.	The Philip Carey Company (Domestic), . . . . .	New York, N. Y.
James Supply Company, . . . . .	Chattanooga, Tenn.	The Philip Carey Company (Export), . . . . .	New York, N. Y.
The Philip Carey Company, . . . . .	Chicago, Ills.	Holland Lumber Company, . . . . .	Omaha, Nebr.
The Philip Carey Company (Home Office Branch) Cincinnati, O.	Cincinnati, O.	The Philip Carey Company, . . . . .	Philadelphia, Pa.
The Breese Bros. Co., . . . . .	Cincinnati, Ohio	Pine Bluff Brick & Material Co., . . . . .	Pine Bluff, Ark.
The R. E. Kramig & Co., . . . . .	Cincinnati, Ohio	The Philip Carey Company, . . . . .	Pittsburgh, Pa.
The Carey Company, . . . . .	Cleveland, Ohio	Pacific Building Materials Company, . . . . .	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	The Philip Carey Company, . . . . .	Richmond, Va.
The Hedges-Atkins Supply Co., . . . . .	Denver, Colo.	The Philip Carey Company, . . . . .	St. Louis, Mo.
The Carey Company, . . . . .	Detroit, Mich.	Allyn L. Burr Company, . . . . .	Sacramento, Calif.
Momsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	Peden Iron & Steel Co., . . . . .	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	Jones Bros. Asbestos Supply Co., Inc., . . . . .	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	George Scofield Company, . . . . .	Seattle, Wash.
Banks-Miller Supply Co., . . . . .	Huntington, W. Va.	Nott-Atwater Company, . . . . .	Spokane, Wash.
The Philip Carey Company, . . . . .	Indianapolis, Ind.	George Scofield Company, . . . . .	Tacoma, Wash.
The Cameron & Barkley Co., . . . . .	Jacksonville, Fla.	The Cameron & Barkley Co., . . . . .	Tampa, Fla.
The Schafer Corporation, . . . . .	Kansas City, Mo.	The Carey Company, . . . . .	Toledo, Ohio
A. G. Heins Company, . . . . .	Knoxville, Tenn.	The Philip Carey Company, . . . . .	Toronto, Ont., Can.
Fischer Cement & Roofing Co., . . . . .	Little Rock, Ark.	Asbestos Covering Company, . . . . .	Washington, D. C.
Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

No. 36

A HEAVY MEMBRANE WATERPROOFING  
TO RESIST HIGH PRESSURE  
DEPENDABLE - DURABLE - ECONOMICAL

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION No. 36

### Abbreviated Specification

WATERPROOFING—To be Carey Waterproofing Specification No. 36 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor required to properly apply a two course construction of Carey  $\frac{1}{4}$ -inch Preformed Membrane System of Waterproofing to..... below ground level.

**Work Not Included**—Proper excavation or other provision must be made to permit working room for applying the membrane.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be cleaned and shall also be smooth and dry prior to applying the waterproof membrane. A cement mortar or brick protection shall be placed over the waterproofing for best results.

#### Materials:

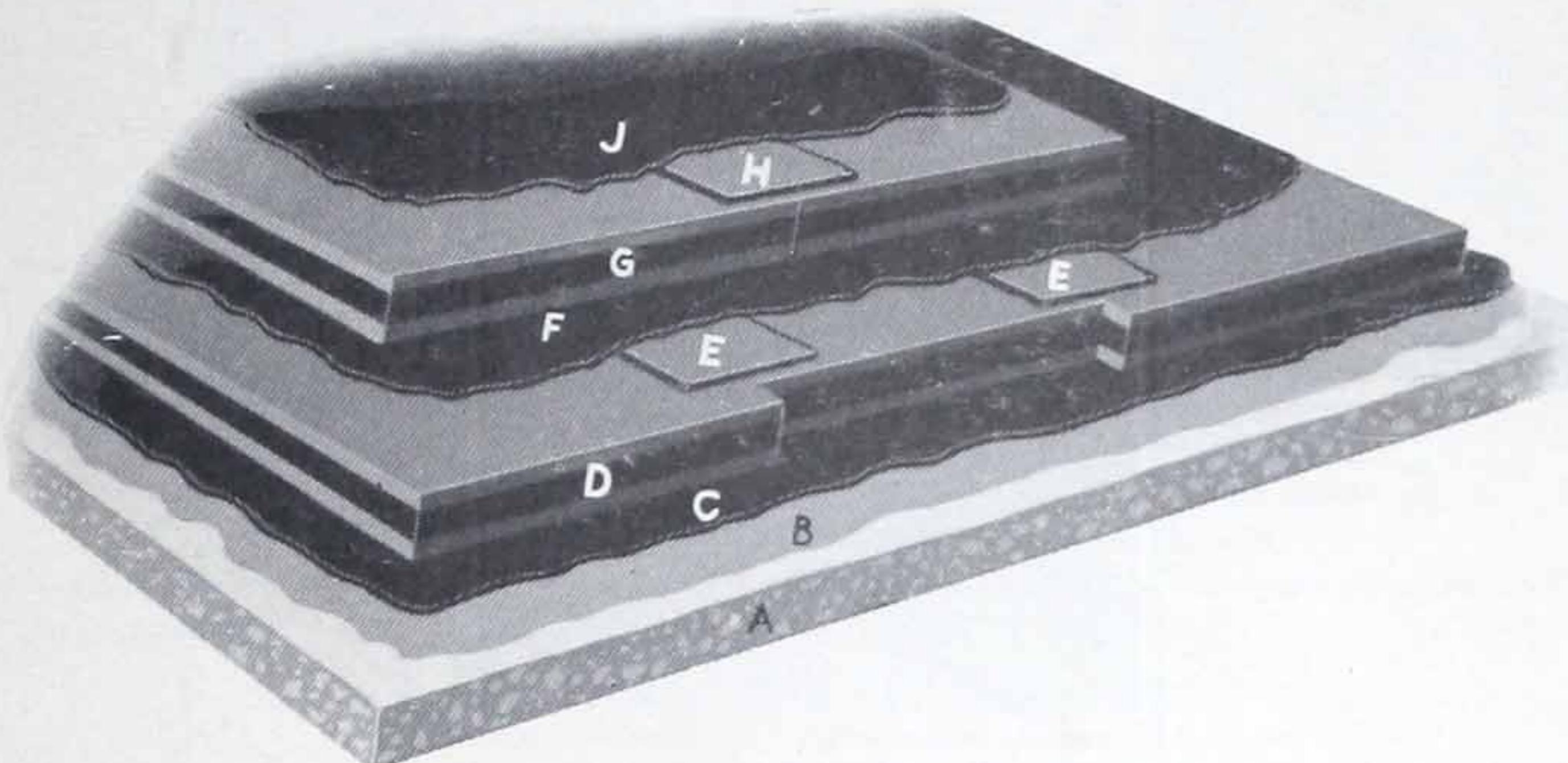
Courses	Lbs. per 100 sq. ft.
(A) Carey Waterproofing Primer (1 gallon)	9
(B) Carey No. 66 Subway Asphalt	50
(C) Carey $\frac{1}{4}$ -inch Preformed Membrane	150
(D) Carey No. 66 Subway Asphalt	30
(E) Carey $\frac{1}{4}$ -inch Preformed Membrane	150
(F) Carey 15-lb. Waterproofing Felt Strips, 12 inches wide, imbedded in hot asphalt	10
(G) Carey No. 66 Subway Asphalt	30
Total approx. weight per 100 sq. ft. to be	429 lbs.

**Application**—CAREY WATERPROOFING PRIMER shall be applied uniformly and thoroughly brushed in. The primed concrete surface shall be mopped with CAREY No. 66 SUBWAY ASPHALT, into which, while hot, shall be embedded one layer of CAREY  $\frac{1}{4}$ -INCH PREFORMED MEMBRANE with all joints butted tightly. Embed the second sheet of  $\frac{1}{4}$ -inch Preformed Membrane in hot No. 66 Subway Asphalt as above, so that the sheets break joints with the first Membrane and in no place shall felt touch felt. Reinforce all joints on the second course with one sheet of CAREY 15-LB. WATERPROOFING FELT, twelve inches wide, cemented down with No. 66 Subway Asphalt applied hot. Any irregularities in adhesion shall be tamped, rolled or mashed by suitable means so as to afford a uniform bonding.

Reinforce all angles at corners, walls, etc., by cementing with CAREY No. 66 SUBWAY ASPHALT applied hot, into which shall be imbedded one thickness of CAREY 15-LB. WATERPROOFING FELT cut to extend at least 6 inches each way from the bend. Three such sheets shall be applied; one immediately after applying the primer and another on each course. Over the entire membrane a final finish of No. 66 Subway Asphalt shall be applied.

## THE EFFICIENT SYSTEM

Minimizes the amount of labor required for its application because the membrane is practically built up to the desired thickness in the factory instead of on the job



A—Concrete  
B—Carey Waterproofing Primer  
C—Carey No. 66 Subway Asphalt  
D—First Course Carey Preformed Membrane  
E—12" Strips 15-lb. Carey Waterproofing Felt  
Imbedded in Asphalt Over Joints  
(Omitted on Two Course Construction.)

F—Carey No. 66 Subway Asphalt  
G—Second Course Carey Preformed Membrane  
H—12" Strips 15-lb. Carey Waterproofing Felt  
Imbedded in Asphalt Over Joints  
J—Carey No. 66 Subway Asphalt

## CAREY PREFORMED MEMBRANE SYSTEM OF WATERPROOFING

Consists of two layers of asphalt saturated felt with a heavy body of asphalt compound interposed, all combined to a uniform thickness under very heavy pressure by a mechanical process.

Since the asphalt, rather than the felt, is the real Waterproofing factor, the Carey Preformed Membrane Waterproofing system does not rely upon a thin "mopping" of asphalt, but provides a thick heavy layer of solid asphalt compound, which is impenetrable to moisture and positively resistant to seepage.

Carey Preformed Membrane is made in standard sheets 3 x 5 feet,  $\frac{1}{8}$ -inch,  $\frac{1}{4}$ -inch and  $\frac{1}{2}$ -inch thick. Can be cut in special sizes with an ordinary roofing knife.

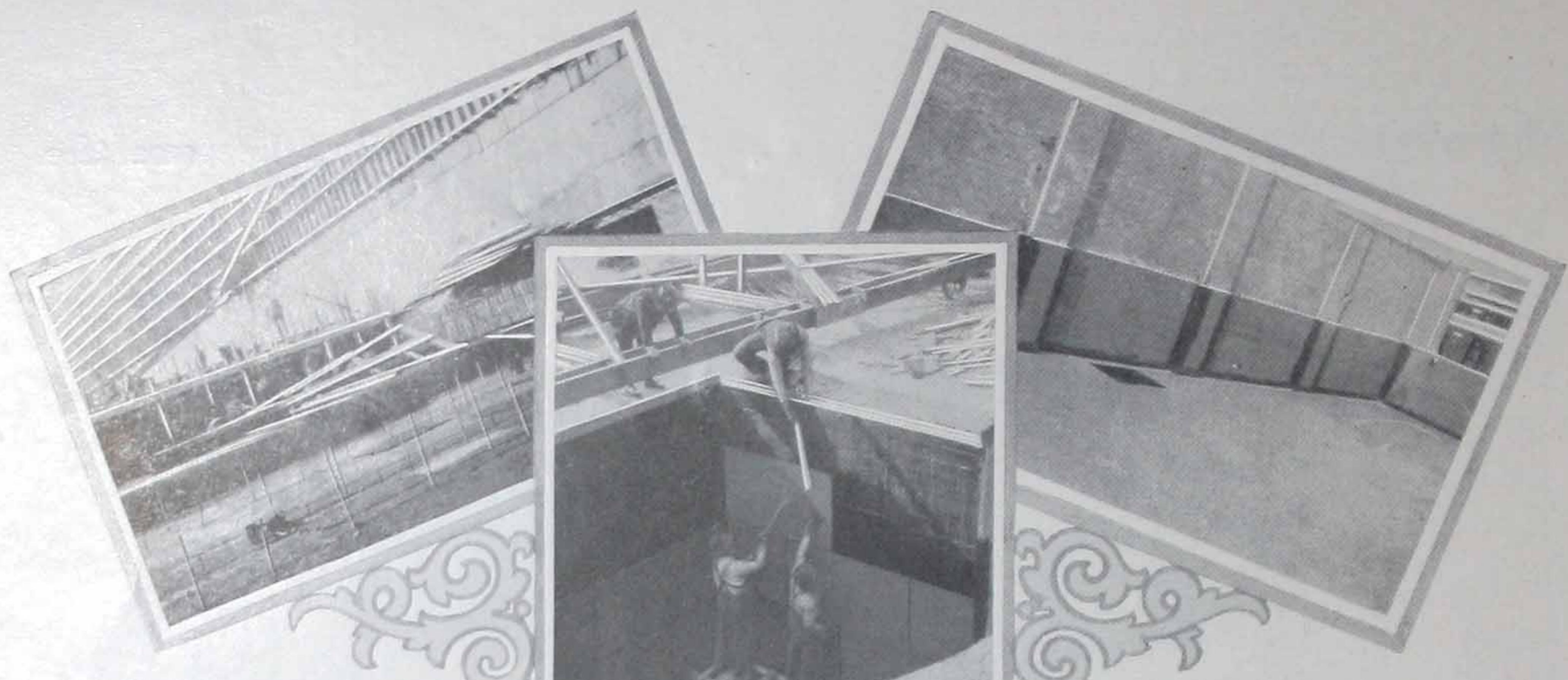
$\frac{1}{8}$ -inch thickness weighs about  $\frac{3}{4}$  lbs. per sq. ft.

$\frac{1}{4}$ -inch thickness weighs about  $1\frac{1}{2}$  lbs. per sq. ft.

$\frac{1}{2}$ -inch thickness weighs about 3 lbs. per sq. ft.

Shipped in substantial wood crates.

CAREY No. 66 SUBWAY ASPHALT is a heavy duty waterproofing asphalt and will not be affected by the acids, alkalies or pressure of deep waterproofing. It is a heavy, dense, pure bitumen.



Waterproofing the Cheswick Power Plant, Cheswick, Pa.

Waterproofing Reservoir, United Railway Co., St. Louis, Mo.

Waterproofing the Cincinnati Subway, Cincinnati, Ohio

### CAREY PREFORMED MEMBRANE SYSTEM OF WATERPROOFING

Hydrostatic Head, in Feet	Pressure, in Lbs. per Sq. Inch	Lifting Pressure, in Lbs. per Sq. Foot Under Floor	Average Pressure, in Lbs. per Sq. Foot on Wall Surface Affected	Plies of Carey Preformed Membrane and No. 66 Subway Asphalt	Cement Mortar or Brick Support on Vertical Walls. Thickness, in Inches
3	1.30	187.5	93.7	1/8" 1 ply	
6	2.60	375.0	187.5	1/4" "	1"
10	4.34	625.0	312.5	1/8" 2 ply	1 1/2"
20	8.68	1250.0	625.0	1/2" "	2"
30	13.02	1875.0	937.5	1/4" 3 ply	2"
40	17.36	2500.0	1250.0	1/4" "	2"
50	21.50	3125.0	1560.0	1/4" "	2"
60	26.04	3750.0	1875.0	1/4" "	3"
70	30.10	4375.0	2184.0	1/4" "	3"
80	34.72	5000.0	2500.0	1/4" "	4"
90	38.70	5625.0	2808.0	1/4" "	4"
100	43.40	6250.0	3125.0	1/4" "	6"



SPECIFICATION

No. 37

FOR WATERPROOFING  
BRIDGES AND OTHER STRUCTURES  
WHERE EXPANSION AND CONTRACTION  
ARE EVIDENT

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.

*Carey*  
**WATER-PROOFING**

**SPECIFICATION No. 37**

**Abbreviated Specification**

WATERPROOFING—To be Carey Waterproofing Specification No. 37 applied in accordance with manufacturers' complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the built-up waterproof membrane to ..... below ground level.

**Work Not Included**—Sufficient working room should be allowed for application of the Membrane. All cracks, holes and voids shall be carefully filled with Portland Cement Mortar and the surface shall be cleaned and dried. A cement mortar or brick protection shall be placed over the waterproofing for best results.

**Materials**—Materials used in the construction of the waterproofing shall be as follows:

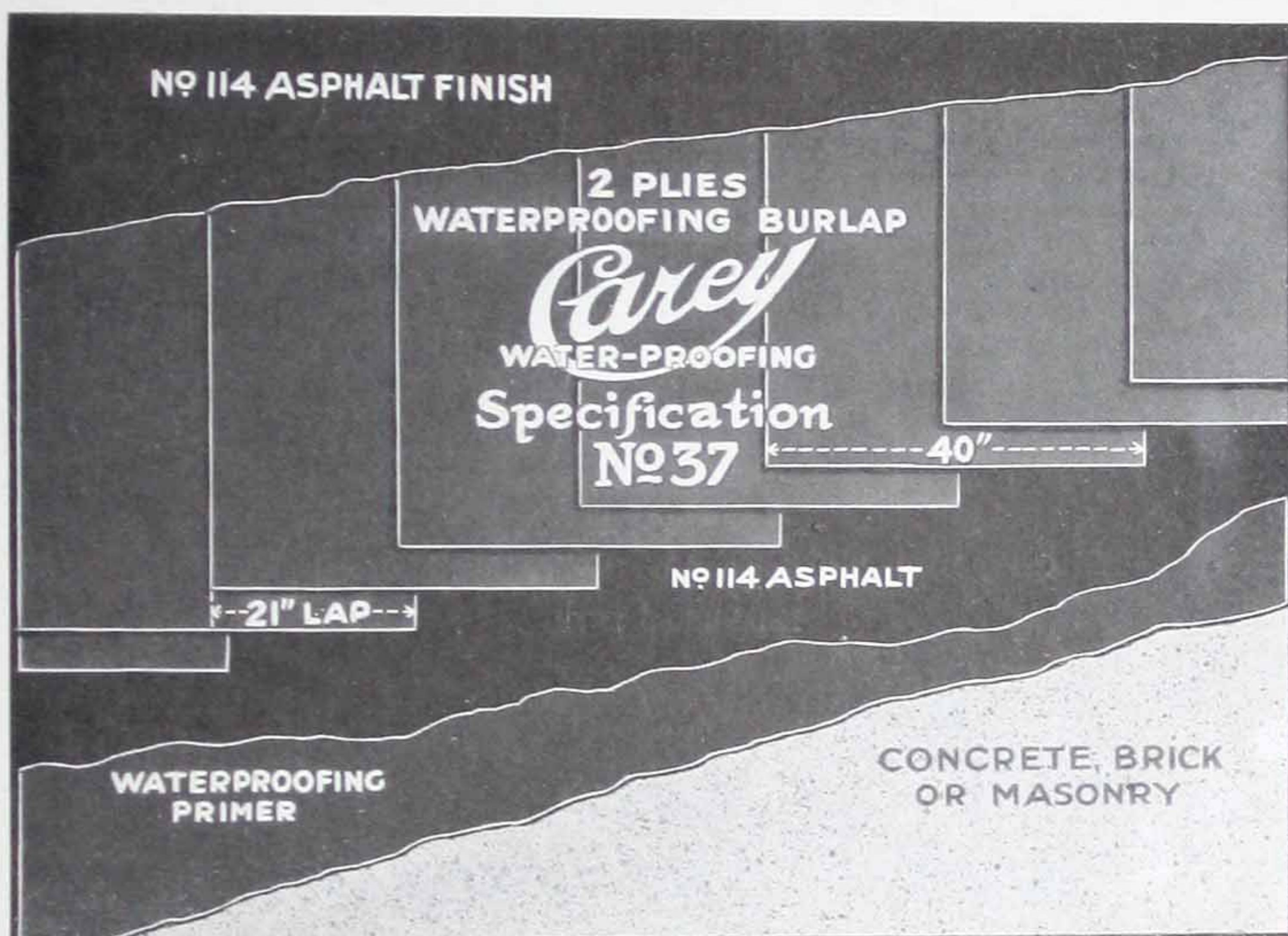
	Courses	Lbs. per 100 sq. ft.
(A)	Carey Waterproofing Primer (1 gallon) .....	9
(B)	Carey Waterproofing Asphalt No. 114.....	50
(C)	Carey Waterproofing Burlap .....	14
(D)	Carey Waterproofing Asphalt No. 114.....	25
(E)	Carey Waterproofing Burlap .....	14
(F)	Carey Waterproofing Asphalt No. 114 .....	25
Total approx. weight per 100 sq. ft. to be .....		137 lbs.

**Application**—CAREY WATERPROOFING PRIMER shall be applied uniformly and thoroughly brushed in. When the primer has dried to a slight tacky state the surface shall be mopped with CAREY WATERPROOFING ASPHALT, No. 114, into which, while still hot, shall be imbedded the first sheet of CAREY WATERPROOFING BURLAP. The second sheet of CAREY WATERPROOFING BURLAP shall overlap the previous sheet twenty-one inches and shall also be imbedded in hot asphalt No. 114, so that at no place shall burlap touch burlap.

Reinforce all angles at corners, walls, etc., by cementing with CAREY WATERPROOFING ASPHALT, No. 114, applied hot, into which shall be imbedded one thickness of CAREY WATERPROOFING BURLAP cut to extend at least six inches each way from the angles. Two such sheets shall be applied; one immediately after applying the primer and another after the membrane is completed. A finishing coat of CAREY WATERPROOFING ASPHALT, No. 114, shall be applied over the entire membrane.

## CAREY WATERPROOFING BURLAP

Should be used where low cost is essential and 5% stretch with fifty pounds tensile strength per ply is sufficient provision against rupture of the membrane, which may be caused by the expansion and contraction of the structure.



The two ply construction is good up to a five foot hydrostatic head.

### CHARACTERISTICS

Weight Treated.....	Minimum 20 oz. per sq. yd.
Weight Untreated.....	" 7½ oz.
Thread Count (both directions) .....	10 per inch.
Tensile Strength (both directions) .....	Minimum 50 lbs. per inch in width.
Stretch (both directions) .....	Minimum 5%.

Packed in rolls 50 yards long, 40 inches wide, 500 square feet each, and wound on wooden mandrels. Unrolls easily.

Carey Waterproofing Burlap is saturated thoroughly with asphalt, so that every fibre is insured as much as possible against decay. The burlap itself is Calcutta burlap made from 100% jute fibres. The completed material is held as close as possible to the specification of the American Society for Testing Materials.

Carey Waterproofing Asphalt, No. 114, also meets with the specification of the American Society for Testing Materials, so by using the Carey Built-up Waterproofing Specification No. 37, standard materials of quality are secured.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

### List of Carey Distributors

P. O. Sorenson Company, . . . . .	Albuquerque, N. M.	The L. J. Bolster Co., Inc., . . . . .	Louisville, Ky.
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The Carey Company, . . . . .	Cleveland, Ohio	Pacific Building Materials Company, . . . . .	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	The Philip Carey Company, . . . . .	Richmond, Va.
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Momsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
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Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

**“B”**

FOR DAMP-PROOFING  
THE INTERIOR SURFACE OF OUTSIDE  
BRICK OR MASONRY WALLS,  
PRIOR TO PLASTERING.

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION

# “B”

(For Damp-proofing the Interior Surfaces of Outside Masonry Walls,  
Prior to Plastering. Furring and Lathing Unnecessary.)

### Abbreviated Specification.

DAMP-PROOFING—To be Carey Damp-proofing Specification “B” applied in accordance with manufacturers’ complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor required to properly apply CAREY PERCOPROOF PLASTER BOND to the interior of all outside brick or masonry walls above ground level, prior to plastering.

**Work Not Included**—This specification does not include pointing up masonry or plastering and cementing of any kind.

All cracks, holes and voids shall be carefully filled with Portland Cement mortar, prior to applying CAREY PERCOPROOF PLASTER BOND.

Twenty-four hours after applying CAREY PERCOPROOF PLASTER BOND, the plaster may be applied.

#### Materials:—

(A) 1 coat Carey Percoproof Plaster Bond, . . . . . 1½ gals. per 100 square feet.

**Application**—After all cracks, holes and voids have been filled carefully with Portland Cement mortar, and the wall is perfectly dry and free from any foreign matter that would interfere with the penetration or bonding qualities of the damp-proofing coat, CAREY PERCOPROOF PLASTER BOND shall be applied uniformly with a good bristle brush, to the interior of outside masonry walls from grade level to roof.

In cases where the CAREY PERCOPROOF PLASTER BOND cannot be applied to the walls continuously through the floor construction, it shall be applied back on the ceiling for at least twelve inches from the wall.

CAREY PERCOPROOF PLASTER BOND shall be applied behind window casings and to all cut-outs and recesses in the wall.

For the first coat at least one and a half gallons of CAREY PERCOPROOF PLASTER BOND shall be used for each one hundred square feet of surface.

A second coat of about one gallon per hundred square feet shall be applied to all very absorbent portions of the wall only.

**C**AREY PERCOPROOF PLASTER BOND forms a barrier against the filtration of dampness and moisture through the walls and prevents hideous plaster stains.

With this specification no furring or lathing is necessary. Plaster is applied directly over the damp-proof coating, bonding firmly and permanently to the walls.

## Bonding

Carey Percoproof Plaster Bond is not a smooth coating but a penetrating damp-proofing coat, consequently the roughness of the wall is unchanged. Upon the roughness of the wall depends the bonding qualities of the Plaster. Therefore, a rough hollow tile or a rough inside course of common brick is generally used.



Applying  
CAREY PERCOPROOF PLASTER BOND.  
Prior to Plastering.

## Qualities

It is often misunderstood that Carey Percoproof Plaster Bond is a tacky substance that causes the plaster to adhere more tenaciously to the wall. Its purpose is to form an impenetrable Damp-proof coating so that the plaster may be applied direct to the rough walls eliminating the use of furring or lathing.

## Carey Percoproof Plaster Bond

is a bituminous damp-proofing compound, black in appearance and of a thin brushing consistency, so that it penetrates the pores of the concrete, brick, stone or tile walls to a depth of probably several inches.

Due to the penetrating quality of CAREY PERCOPROOF PLASTER BOND, it coats the walls of the pores sealing them at a considerable depth, but does not fill these pores entirely so that through a microscope the wall still looks porous. The capillary action or so called suction is not eliminated, and no trouble is experienced in the plaster slipping when being applied.

The Asphalt in CAREY PERCOPROOF PLASTER BOND is manufactured from pure asphaltic petroleum, so there is no organic matter present that may be affected by alkalies or acids. When dry it will not rub off, flake or peel, but rather it will be tough and elastic.

CAREY PERCOPROOF PLASTER BOND comes ready for use and is applied without the use of heat or the addition of any further solvents.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

**List of Carey Distributors.**

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Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.



SPECIFICATION

“C”

FOR DAMP-PROOFING  
THE OUTSIDE OF FOUNDATION WALLS  
AND OTHER STRUCTURES

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THE PHILIP CAREY MFG. COMPANY

THE PHILIP CAREY COMPANY  
General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.

*Carey*  
**DAMP - PROOFING**

**SPECIFICATION**  
**“C”**

(For Damp-proofing the Outside of Foundation Walls, Concrete Bridges, Abutments, Culverts, Retaining Walls and Other Structures Below Ground Level.)

**Abbreviated Specification.**

DAMP-PROOFING—To be Carey Damp-proofing Specification “C” applied in accordance with manufacturers’ complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor required to properly apply CAREY PERCOPROOF DAMP-PROOFING COMPOUND to the outside of all foundation walls, earth filled bridges, culverts, subways, tunnels and other constructions below ground level.

**Work Not Included**—For this specification the excavation should be made at least two feet beyond the foundation wall line, to permit a man working room for application of the damp-proofing coat to the outside of the foundation walls.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar, and the surface shall be thoroughly cleaned and shall also be smooth and sufficiently dry to obtain good adhesion prior to applying CAREY PERCOPROOF DAMP-PROOFING COMPOUND.

Earth back-filling may be started 24 hours after the last coat.

Drain tile may be laid around the footings.

**Materials:**—

- (A) 1 coat Carey Percoproof Damp-proofing Compound..1½ gal. per 100 sq. ft.
- (B) 1 coat Carey Percoproof Damp-proofing Compound..1 gal. per 100 sq. ft.

**Application**—After all cracks, holes and voids have been filled carefully with Portland Cement mortar, and the foundation wall is perfectly dry and free from any foreign matter that would interfere with the penetration or bonding qualities of the damp-proofing coat, CAREY PERCOPROOF DAMP-PROOFING COMPOUND shall be applied uniformly with a good bristle brush to the outside of foundation walls from footings to ground level.

For the first coat, at least one and a half gallons of CAREY PERCOPROOF DAMP-PROOFING COMPOUND shall be used for each one hundred square feet of surface.

Not less than twenty-four hours after applying the first coat of CAREY PERCOPROOF DAMP-PROOFING COMPOUND a second coat shall be applied. The second coat shall take at least one gallon per one hundred sq. ft. of surface.

THE day of the damp unhealthy basement is past, and no residence should be built without applying a Damp-proof Coating or Water-proof Membrane to the outside of the foundation walls.

This specification places an impermeable damp-proofing coat on the outside of foundation walls. On account of the limpid character of CAREY PERCOPROOF DAMP-PROOFING COMPOUND the first coat penetrates the concrete, brick or stone, and seals the pores to a depth of several inches. The second coat fills these pores and adds a film approximately  $1/64$ " thick, building up a damp-proofing barrier that will withstand the average pressure of ground water encountered around the foundation walls of a residence or structures built 8 or 10 ft. below ground level. However, it must be borne in mind, that CAREY PERCOPROOF DAMP-PROOFING COMPOUND is a damp-proofing coat and will not withstand direct hydrostatic pressure to any extent.



Applying Carey Percoproof to Outside of Foundation Wall.

CAREY PERCOPROOF DAMP-PROOFING COMPOUND is manufactured from a highly refined tar obtained from direct distillation of coal tar and refined in such a manner as to afford a flexible coating. It contains no vegetable oils, and consequently, will not be affected by the alkalies or acids in the ground water.

CAREY PERCOPROOF DAMP-PROOFING COMPOUND will dry to a tacky state, will not become brittle, flake or peel and will respond to the expansion and contraction of the concrete, brick or stone structure.

## Carey Percoproof Damp-proofing Compound

has been used for the past fifty years as a damp-proofing coat on such structures as earth filled bridges, culverts, foundation walls, subways and tunnels, and has been found to be an all around damp-proofing compound if properly applied as per specification.

CAREY PERCOPROOF DAMP-PROOFING COMPOUND comes ready for use and is applied with a large brush in a manner similar to paint. No heat or the addition of other solvents is necessary. It is packed in containers from one gallon cans to fifty gallon barrels.

Make the basement as healthful to live in as the first, second or third floors.



The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
Established 1873

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Banks-Miller Supply Co., . . . . .	Jacksonville, Fla.	Nott-Atwater Company, . . . . .	Spokane, Wash.
The Philip Carey Company, . . . . .	Kansas City, Mo.	George Scofield Company, . . . . .	Tacoma, Wash.
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A. G. Heins Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Toronto, Ont., Can.
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SPECIFICATION

“D”

FOR DAMP-PROOFING  
THE OUTSIDE OF FOUNDATION WALLS  
AND OTHER STRUCTURES

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General Offices and Main Plant,  
LOCKLAND, CINCINNATI, O.



## SPECIFICATION “D”

(For Damp-proofing the Outside of Foundation Walls, Earth Filled Bridges, Abutments, Culverts, Retaining Walls, Subways, Tunnels, Reservoirs and Other Structures Below Ground or Water Level).

### Abbreviated Specification

DAMP-PROOFING—To be Carey Damp-proofing Specification “D” applied in accordance with manufacturers’ complete specifications.

**Work Included**—This specification contemplates furnishing all materials and labor to properly apply the damp-proofing coat to all outside surfaces below ground or water level.

**Work Not Included**—For this specification the excavation should be made at least two feet beyond the foundation wall line, to permit a man working room for application of the damp-proofing coat to the outside of the foundation walls.

Pointing up masonry or cementing of any kind is not included. All cracks, holes and voids should be carefully filled with Portland Cement mortar and the surface shall be thoroughly cleaned and shall also be smooth and sufficiently dry to obtain good adhesion prior to applying the PRIMER and ASPHALT.

Earth back-filling may be started 24 hours after the last coat.

Drain tile may be laid around the footings.

#### Materials:—

- (A) 1 coat Carey Waterproofing Primer . . . . . (1½ gals.) 14 lbs. per 100 sq. ft.
- (B) 1 coat Carey Damp-proofing Asphalt No. 113 . . (6 gals.) 54 lbs. per 100 sq. ft.

**Application**—After all cracks, holes and voids have been filled carefully with Portland Cement mortar, and the wall is perfectly dry and free from any foreign matter that would interfere with the penetration or bonding qualities of the primer, the CAREY WATERPROOFING PRIMER shall be applied uniformly with a good bristle brush using at least one and a half gallons for each one hundred square feet.

When the Primer has dried to a slightly tacky state it is ready for the Asphalt coat.

CAREY DAMP-PROOFING ASPHALT, No. 113, shall be heated to about 250° F. to 300° F. in a kettle. From there it shall be transferred to large buckets and mopped on the primed surface using a minimum of (6 gals.) 54 pounds for every one hundred square feet.

**C**AREY DAMP-PROOFING SPECIFICATION "D" forms an impenetrable damp-proofing coat that seals the pores of the concrete and thus prevents the absorption of water that raises such havoc with concrete structures upon freezing and thawing. This fact is also true of brick, stone, tile or masonry construction.

## ABSORPTION

It is absolutely a practical fact, that no matter how dense it is attempted to make concrete or what integral waterproofing reagents may be used, concrete cannot be made denser than average limestone, which will absorb three and one-half pounds of water per cubic foot.



Applying Hot Asphalt to Foundation Walls

## QUALITY MATERIALS

CAREY WATERPROOFING PRIMER is a pure Asphalt Primer manufactured from natural asphaltic petroleums and well selected solvents. It is a standard product manufactured to meet the specifications of the American Society for Testing Materials for Primer for use with Asphalt in Damp-proofing and Waterproofing below and above ground or water level.

CAREY WATERPROOFING PRIMER comes ready for use, packed in one gallon cans to fifty gallon barrels.

CAREY DAMP-PROOFING ASPHALT, No. 113, is a blown asphalt blended from natural asphaltic petroleums. It is so tempered as to remain ductile and pliable at practically all temperatures encountered, whether above or below ground or water level. It is completely soluble in Carbon Bisulphide, which absolutely demonstrates its purity, so that there is no organic or foreign matters present, that may be affected by the acids or alkalies in the ground water.

CAREY DAMP-PROOFING ASPHALT, No. 113, meets the specification of the American Society for Testing Materials for Asphalt for use in Damp-proofing or Waterproofing below ground level.

CAREY DAMP-PROOFING ASPHALT, No. 113, after heating to approximately 250° F. to 300° F. is ready for use and is applied with a mop to a uniform coating.

It is shipped in steel drums, 50, 100, 200, 300 and 400 pounds each.

## PREVENTED

This specification is an ideal Damp-proofing Specification for foundation walls, state highway earth filled bridges, culverts, retaining walls and abutments. It will drain off the water encountered in this type of construction and prevent absorption and seepage.

FTER  
RECORD  
RKS

# THE PHILIP CAREY CO.

22ND & WESTMORELAND STS.

PHILADELPHIA, PA.

# THE PHILIP CAREY CO.

22ND & WESTMORELAND STS.

PHILADELPHIA, PA.



GENERAL OFFICE & MAIN PLANT  
Lockland, Cincinnati, Ohio.

The Home of  
Carey Damp-Proofing and Water-Proofing Materials  
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The Carey Company, . . . . .	Cleveland, Ohio	Pacific Building Materials Company, . . . . .	Portland, Ore.
Rogers Asbestos Company, Inc., . . . . .	Dallas, Texas	The Philip Carey Company, . . . . .	Richmond, Va.
The Hedges-Atkins Supply Co., . . . . .	Denver, Colo.	The Philip Carey Company, . . . . .	St. Louis, Mo.
The Carey Company, . . . . .	Detroit, Mich.	Allyn L. Burr Company, . . . . .	Sacramento, Calif.
Monsen-Dunnegan-Ryan Co., . . . . .	El Paso, Texas	The Galigher Machinery Co., . . . . .	Salt Lake City, Utah
Dyke Bros., . . . . .	Ft. Smith, Ark.	Peden Iron & Steel Co., . . . . .	San Antonio, Texas
Peden Iron & Steel Co., . . . . .	Houston, Texas	Jones Bros. Asbestos Supply Co., Inc., . . . . .	San Francisco, Calif.
Rogers Asbestos Company, Inc., . . . . .	Houston, Texas	George Scofield Company, . . . . .	Seattle, Wash.
Banks-Miller Supply Co., . . . . .	Huntington, W. Va.	Nott-Atwater Company, . . . . .	Spokane, Wash.
The Philip Carey Company, . . . . .	Indianapolis, Ind.	George Scofield Company, . . . . .	Tacoma, Wash.
The Cameron & Barkley Co., . . . . .	Jacksonville, Fla.	The Cameron & Barkley Co., . . . . .	Tampa, Fla.
The Schafer Corporation, . . . . .	Kansas City, Mo.	The Carey Company, . . . . .	Toledo, Ohio
A. G. Heins Company, . . . . .	Knoxville, Tenn.	The Philip Carey Company, . . . . .	Toronto, Ont., Can.
Fischer Cement & Roofing Co., . . . . .	Little Rock, Ark.	Asbestos Covering Company, . . . . .	Washington, D. C.
Warren & Bailey Company, . . . . .	Los Angeles, Calif.	The Philip Carey Company, . . . . .	Wheeling, W. Va.

## WATERPROOFING ESTIMATE SHEET.

BID No. \_\_\_\_\_

SHEET No. \_\_\_\_\_

DATE SUBMITTED

DATE BIDS CLOSE

D SUBMITTED TO (name and address)

LOCATION

PROJECT

OWNER (name and address)

ARCHITECT (name and address)

CONTRACTOR (name and address)

IND OF STRUCTURE

NUMBER OF SQUARES

TO BE CAREY WATERPROOFING SPECIFICATION No.

ON WATERPROOFING, AMOUNT BID

ON DRAINAGE,

AMOUNT BID

ON EXCAVATION, AMOUNT BID

ON EARTH BACK FILLING, AMOUNT BID

ON CEMENT WORK, AMOUNT BID

ON METAL WORK, AMOUNT BID

## ESTIMATED QUANTITY TO BE USED.

MATERIALS TO BE USED	Estimated Weights	Costs Figured per Sq. Cwt., Ton, Lbs., Gal., Etc.	Total Cost Used in Figuring Each Material	ACTUAL COSTS AND WEIGHTS OBTAINED AFTER COMPLETION OF CONTRACT, FOR FUTURE RECORD		
				Corrected Weight	Corrected Cost of Each Material	REMARKS
Carey Waterproofing Felt (15 lbs. per 108 sq. ft.)						
Carey Waterproofing Felt (30 lbs. per 108 sq. ft.)						
Carey Waterproofing Felt (... lbs. per 108 sq. ft.)						
Carey Waterproofing Asbestos Felt (15 lbs. per 108 sq. ft.)						
Carey Waterproofing Asbestos Felt (35 lbs. per 108 sq. ft.)						
Carey Waterproofing Asbestos Felt (... lbs. per 108 sq. ft.)						
Carey Fabricated Membrane (40 lbs. per 108 sq. ft.)						
Carey Heavy Waterproofing Fabric						
Carey Light Waterproofing Fabric						
Carey Waterproofing Burlap						
Carey Preformed Membrane $\frac{1}{8}$ " thick						
Carey Preformed Membrane $\frac{1}{4}$ " thick						
Carey Preformed Membrane .." thick						
Carey Waterproofing Primer						
Carey Waterproofing Asphalt, No. 114						
Carey Damp-Proofing Asphalt, No. 113						
Carey Coal Tar Pitch						
Carey Waterproofing Tarred Felt						
Carey Percoproof Damp-Proofing Compound						
Carey Percoproof Plaster Bond						
Carey Waterproofing Compound						
Lumber						
Nails	Size					
Mops	Size					
Mop Yarn						
Brushes						
Cost, Removing Old Waterproofing						
Fuel						
Check, Kettles, Rope and Tackle,						
Dippers, Buckets, Axes, Hatchets,						
Ladders, Boots, Picks, Shovels, etc.						
For Freight Charges						
Cost of all Hauling						
R. R. and Car Fares						
Board and Lodging						
Application Cost, Labor						
Add for Probable Delays						
Add for Guarantee Maintenance						
Cost Insurance, Liability, Fire, etc.						
Total Weight of all Materials						
Freight, per cwt.						
Overhead						
Total Cost						
Add Profit						
Price Quoted						

# Details and Information for Estimating Waterproofing Work.

1. Attach Blueprints of Structure with Measurements and Details.
2. Attach Exact Copy of Waterproofing Specifications.
3. It is important that you attach to this report an exact copy of concrete specification which shows how concrete surface must be finished before waterproofing goes on.
4. New or Old Structure?
5. Kind of Waterproofing now on Structure?
6. Height or Depth of Waterproofing Above or Below Ground Level?
7. Average Height of Vertical Walls from Footings?
8. Are we to figure on any Excavating?
9. Earth Excavating. How much?
10. Rock Excavating. How much?
11. Must any piles be driven to hold up earth wall?
12. Will there be any Water Bailing or Pumping? About how many gallons per minute?
13. Would you recommend Steam Pump, Electric Pump, Gasoline Pump, or Hand Bailing?
14. Must we build Wooden Scaffold to work on Vertical Walls?
15. Pitted or Smooth Surface (concrete, brick or masonry)?
16. Are we to figure on Pointing Up the Brick, Concrete, or Masonry Surface?
17. Are we to figure on any metal counterflashing?
18. State if counterflashing is to be copper, iron, and what gauge.
19. Are we to figure on a Concrete or Brick Protection of Waterproof Membrane?
20. Are we to figure on Furnishing and Laying Drain Tile?
21. Are we to figure on Earth Back Filling? How much?
22. Is there room for our Pitch Kettles near Structure?
23. Will Contractor Hoist or Lower our Materials to Level of Work? At what charge?
24. Do we take off Old Waterproofing? Must we haul Old Waterproofing to Dump? Cost?
25. Must we hoist or lower Old Waterproofing in Buckets or can we throw it to ground level?
26. See if Old Waterproofing can be removed easily from surface or must it be Dug Off.
27. Can we Secure Laborers, and at What Rate Per Hour?
28. Name Nearest R. R. Depot How far from Work?
29. What R. R. Switch to Structure?
30. Give Name and Address of Drayman, and Get the Cost of Hauling.
31. Can our Materials be Safely Stored at or Near Work?
32. What is Structure used for?
33. Is Guarantee Demanded and how long?
34. Are there any Unusual Conditions, such as Poor Design of Structure, Excess Hydrostatic Pressure, Acid or Alkali Ground Water?
35. When will work be ready for Waterproofing?
36. Can we do this work in its Entirety when we start?
37. Remarks:

## DETAILS FOR FIGURING LABOR COST.

ITEMS	Hours	Rate Hour	TOTAL	NAME	ADDRESS
Setting up Kettles.					
Unloading To and From.					
Preparing Surface.					
Setting up Hoist or Staging.					
Scaffolding.					
Mopping.					
Nailing.					
Laying Sheets.					
Attending Kettles.					
Hoisting, Lowering and Carrying Materials.					
Reinforcing Strips at Corners.					
Removing Old Waterproofing.					
Hauling.					
Extra Work.					
Loading.					
Delays Probable.					
Supervision.					

THE PHILIP CAREY CO.  
22ND & WESTMORELAND STS.  
PHILADELPHIA, PA.

CONTRACT FOR WATERPROOFING AWARDED TO



